

**Recent military fatalities in Afghanistan by cause and nationality:**  
 (PERIOD 17 ~ 11 June 2012 to 28 October 2012; posted on 8 November 2012)  
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***In memoriam:** Shortly after we posted our PERIOD 16 report, Colonel Clive B. Fairweather CBE - a very dear friend - was diagnosed with an inoperable brain tumour. Clive died on 13 October 2012. In Edinburgh on 15 November 2012, there will be a celebration of his maverick life – as elite soldier, Scotland’s most outstanding HM Chief Inspector of Prisons, fundraiser extra-ordinaire for Combatstress, Honorary Fellow of the Royal Statistical Society, wit-and-wisdom commentator on public affairs, and jester.*

***Memo:** A surge of 30,000 US troops was deployed to Afghanistan to facilitate Operation Moshtarak, which began in 2010. By PERIOD 11b, US deployment of 90,000 by province was reckoned as 20,000 to Helmand, NK2 to Kandahar and NK3 elsewhere. In June 2011, towards the end of PERIOD 14a, US President Obama announced the start of draw-down of US troops – an initial 5,000 to 10,000 in 2011. By the end of September 2012, US deployment to Afghanistan had reverted to around 68,000. Canadian troops had no combat role after 2011. Withdrawal of French troops was to begin in July 2012 and be completed by the end of 2012. UK troops had reduced to 9,500 by early 2012, and should be 9,000 by the end of 2012.*

*In September 2012, six US Harrier strike aircraft, whose replacement cost is \$30 millions each, were destroyed and two others seriously damaged in a Taliban attack on Camp Bastion which claimed the lives of two US personnel. The attackers wore US uniforms, and so these ISAF-fatalities are counted as Green-on-Blue. In September 2012, ISAF reduced its participation – at least temporarily - in joint operations with Afghan security forces unless they were specifically authorized.*

**Overview**

*Our calendar-year resume on UK fatality-rates in Afghanistan relies only on total number of UK military fatalities in each calendar year and a **mid-year estimate** for the number of UK troops deployed to Afghanistan. The resume lacks detail on when troop numbers escalated and does not differentiate, as our more detailed analyses do, between the ‘fighting season’ and Afghan winter. Even so, the resume summarizes key features: i) 2011 is the first of the past six completed calendar-years in Afghanistan when UK troops had faced less than major combat (which we define operationally as: 6 fatalities per 1,000 personnel-years) and ii) 2009 and 2010 exacted a very heavy UK toll indeed.*

Calendar year	UK military fatalities in Afghanistan, <b>F</b>	Mid-year UK troop deployment, <b>P</b>	Estimated UK fatality-rates per 1,000 personnel-years, based on <b>F</b> and <b>P</b> only
2006	39 <sup>Nimrod=14</sup>	4,500	<b>8.7</b> (95% CI: 6.2 to 11.8)
2007	42	6,900	<b>6.1</b> (95% CI: 4.4 to 8.2)
2008	51	8,000	<b>6.4</b> (95% CI: 4.7 to 8.4)
2009	108	9,000	<b>12.0</b> (95% CI: 9.7 to 14.3)
2010	103	10,000	<b>10.3</b> (95% CI: 8.3 to 12.3)
2011	46	10,000	<b>4.6</b> (95% CI: 3.4 to 6.1)
2012 [to 28 Oct]	[41]	9,500	[5.2 (95% CI: 3.7 to 7.1)]

*Corresponding detail for ISAF-trained, deployed Afghan National Army (ANA) troops is lacking. However, in performance monitoring terms, the UK government should know, and be transparent about, the level of combat that ISAF-trained ANA forces encounter, and how their fatality-rate compares with that of ISAF-nations. Instead, we have recourse to a journalistic vignette from which to draw preliminary inference.*

***Vignette:*** *On 7 October 2012, Quentin Sommerville (QS) reported for BBC News, Kabul as follows (see <http://www.bbc.co.uk/news/world-south-asia-19834021>):*

*“In a circle of trees at the heart of the international mission’s headquarters in Kabul, there are 50 flags. One for each of the coalition countries that make up the force that is fighting the Taliban.*

*Under the trees, in the early morning shade, a few hundred soldiers stand still, listening, as the names of that week’s dead are read aloud. The first was that of a Jordanian soldier, then a British sergeant and two British captains. Next an American gunner’s mate, and two more sergeants.*

*An Afghan officer stepped forward. He read just a number: 31. The service is short, it barely lasts five minutes. There is not enough time to read the names of all the Afghan dead.”*

***Statistical inference based on QS’s journalistic vignette:*** *That week’s ISAF toll was seven. The Afghan dead numbered 31. We shall assume that all 31 were ISAF-trained ANAs. If ISAF troops numbered around 113,000 at the end of September 2012 and ISAF-trained, deployed ANA troops were about 195,000 (as had been projected), then the relative fatality-rate for ANA: ISAF troops would be around 2.5:1 if Quentin Sommerville’s reported ratio of fatalities (31:7) was typical (ie representative).*

***However, we should not have to rely on QS’s presence at ISAF’s Kabul headquarters (HQ), nor on the account for a single week! ISAF-HQ’s weekly accounts of the ANA deceased could, and should, be accumulated and publicly disseminated.***

*The need for transparent accounting is the greater because, in the 80 weeks of PERIODS 13+14+15+16 (29 November 2010 to 10 June 2012) when there were 804 ISAF-fatalities in Afghanistan, treachery by Afghan personnel or trainees claimed at least 41 ISAF-lives (all by small arms fire, saf), and so caused 5% of all deaths and 41/152 (27%) of saf-deaths. The Green-on-Blue (G-on-B) toll was, proportionately, even greater in PERIOD 17, see below.*

## Summary

### **Green-on-Blue fatalities**

a) In PERIOD 17, there were 170 ISAF-fatalities in Afghanistan, of whom 29 (17%) were identified on [icasualties.org](http://icasualties.org) as Green-on-Blue (G-on-B). We, however, have chosen **not** apply this G-on-B designation to two US fatalities in the Taliban's attack on Camp Bastion but we do include one extra G-on-B fatality, a US sergeant 1<sup>st</sup> class, who died by small arms fire on 18 August 2012 at Kandahar, is likely by the account given in *The Long War Journal* (LWJ), see [http://www.longwarjournal.org/archives/2012/08/green-on-blue\\_attack.php](http://www.longwarjournal.org/archives/2012/08/green-on-blue_attack.php). We make grateful acknowledgement to LWJ's authors: Bill Roggio & Lisa Lundquist.

Although [icasualties.org](http://icasualties.org) now gives a generally-reliable account of G-on-B fatalities in 2012, its reliability does not hold up for preceding years. We have therefore found it necessary and useful to make cross-reference between [icasualties.org](http://icasualties.org) and the detailed accounts given in LWJ. We summarize our findings below: **there were 97 Green-on-Blue ISAF-fatalities from 1 January 2008 to 28 October 2012**. Please see **Appendix** for explanation of our cross-referencing decisions. The increase between 2010 and 2012 is disproportionate to the indicative numbers of Afghan Security Forces, and of ANAs – at least before co-deployment is taken into account, on which we have no publicly-available data.

Calendar year	Best estimate of Green-on-Blue fatalities (%)	Afghan Security Forces: October indicative #	ANA: October indicative #	Number of ANAs who are ISAF co-deployed ??
2008	2 ( 1% of 295)	148,000	68,000	
2009	10 ( 2% of 521)	190,000	95,000	
2010	11 ( 2% of 711)	261,000	145,000	
2011	25 ( 4% of 566)	312,000	171,000	
2012 to 28 Oct.	49 (13% of 366)	350,000	195,000	

### **IED-only fatalities versus Green-on-Blue fatalities**

b) In the 80 weeks of PERIODS 9 to 12, there were **396** fatal IED-only incidents in Afghanistan, which caused **545** military deaths (that is: mean of 1.4 deaths per fatal IED-only incident) and the proportion of hostile deaths due to IEDs was **57%** (545/962; 95% CI: 53% to 60%). In the 80 weeks of PERIODS 13 to 16, there were **241** fatal IED-only incidents which caused **333** military deaths (that is: mean of 1.4 deaths per fatal IED-only incident) and accounted for a significantly lower percentage, **49%**, of all hostile deaths (333/684; 95% CI: 45% to 53%).

In PERIOD 17, there were **32** fatal IED-only incidents which caused **46** military deaths but accounted for **32% only** of all hostile deaths (46/147, 95% CI: 24% to 39%). In PERIOD 17, however, **13 fatal G-on-B incidents caused 28 Green-on-Blue fatalities** (that is: mean of 2.2 deaths per fatal G-on-B incident) and accounted for **19%** of all hostile deaths (28/147; 95% CI: 12% to 25%).

c) In PERIODS 9 to 16, the proportion of fatal IED-only incidents which claimed **more than two military lives** was **one in 13**, or 49/637 (7.7%, 95% CI: 5.6% to 9.8%). Similarly, in PERIOD 17, 2/32 fatal IED-only incidents claimed **more than two military lives** (three and six). But 5/13 fatal G-on-B incidents in PERIOD 17 claimed **more than two military lives**, and 12 out of all 45 fatal G-on-B incidents since 1 January 2008 (95% CI: 13% to 40%), that is: **one in four**.

d) In PERIODS 13+14+15+16, 152/689 hostile deaths (22%) were from small arms fire (only), 41 of them apparently Green-on-Blue fatalities so that Green-on-Blue accounted for 41/689 hostile deaths (6%), and for 41/152 deaths by small arms fire (27%, 95% CI: 20% to 34%).

In PERIOD 17, 54/147 hostile death (37%) were from small arms fire (only), 28 of them Green-on-Blue fatalities, that is: 28/147 hostile deaths (19%), and 28/54 deaths by small arms fire (52%, 95% CI: 38% to 65%) were Green-on-Blue, significantly higher proportions than in PERIODS 13+14+15+16.

e) The calendar-year pattern of **IED-only fatalities** in Afghanistan among UK's presumed EOD personnel\* (1, 4, 9 in 2006+2007+2008, 2009, and 2010) was discordant with the rate at which UK's IED-only military fatalities had increased in the same calendar periods (namely 43, 76, 55: chi-square on 2df = 7.2,  $p < 0.05$ ). Early in 2011, UK commanders changed bomb disposal tactics in Afghanistan: so that a different trend might emerge. Since 2011 to 28 October 2012, there were three IED-only fatalities in presumed EOD personnel when 6.5 would have been expected on a 2010-basis: encouraging, but not definitive, in a statistical sense.

### **Large clusters of fatalities**

g) Large clusters of fatalities continue to occur: seven large death-clusters in the past 80 weeks have claimed 77 military lives, as follows.

In PERIOD 14, there were three large death-clusters: one, of eight US fatalities, occurred when two IEDs exploded in a single incident and a second when, in small arms fire & apparently after an argument, a senior-ranking Afghan National Army (ANA) pilot opened fire on, and killed, 8 US personnel at Kabul International Airport, six of them senior officers {Lt. Colonel, 5 majors, 2 captains and Master Sergeant}; the third was the largest cluster of ISAF fatalities in Afghanistan in 2006-2011 when 30 US military personnel (including special forces and a Lieutenant Commander) and others\* died, the Taliban having brought down a Chinook helicopter in Wardak.

In PERIOD 15, there were six US fatalities in a non-hostile helicopter crash.

In PERIOD 16, 12 Turkish fatalities (who included four majors) occurred in a non-hostile helicopter crash.

In PERIOD 17, there were seven US fatalities in a hostile helicopter crash in Kandahar and six US fatalities in an IED attack in Wardak.

### **Changed UK deployment: impact of US surge (and now draw-down) in Helmand**

g) UK military fatality rate in Afghanistan essentially doubled between the initial 160 weeks from 1 May 2006 (**PERIODS 1 to 8: 160 weeks**) and subsequent 70-weeks of **PERIODS 9+10+11+12a** (18 May 2009 to 19 September 2010) prior to UK-to-US hand-over of counter-insurgency responsibilities in Sangin). Post hand-over, in the 90-weeks of **PERIODS 12b+13+14+15+16** (20 Sept 2010 to 10 Jun 2012), UK's fatality rate in Afghanistan reduced to below the level of major combat. It is too early to be sure about the impact on UK fatality-rates of US draw-down as completed by the end of September 2012.

**PERIODS 1 to 8:** 7.4 per 1,000 pys (95%CI: 6 to 9, based on 152 fatalities in 20,476 pys)

**PERIODS 9 to 12a:** 14 per 1,000 pys (95%CI: 13 to 16, based on 178 fatalities in 12,885 pys)

**PERIODS 12b to 16:** 4.7 per 1,000 pys (95%CI: 3 to 6, based on 80 fatalities in 17,115 pys)

**PERIOD 17:** draw-down 4.9 per 1,000 pys (95%CI: 3 to 8, based on 18 fatalities in 3,644 pys).

### **Afghan National Army (ANA)\***

h) Monitoring is needed of **number deployed** of ISAF-trained ANA personnel; and **their** fatalities.

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***1. Background***

Since 1 May 2006 Bird & Fairweather have reported every 20 weeks, and sometimes 10 weekly, on military fatalities in Afghanistan and Iraq by cause and nationality. Our analyses<sup>5,3</sup> rely on icasualties.org, to which we make acknowledgement. Date and cause of fatalities on icasualties.org are subject to change as well as to updating. For example, in late July 2009, military fatalities in Afghanistan in the first half of PERIOD 9 were shown as 119, but now as 120. Because the initial phase of Panther's Claw, a major counter-insurgency operation in the run-up to elections in Afghanistan, ended mid-way through PERIOD 9, unusually we reported a mid-point analysis: please see **Journal of the Royal United Services Institute 2009; 154: 30-38 & 40-45**<sup>35, 36</sup>.

With two mid-point exceptions – determined by UK's withdrawal from Basra City and, as above, the initial phase of Panther's Claw having ended - our analyses, until 2010, have related to 140-day PERIODS: see below. As of PERIOD 11a (22 February to 2 May 2010), we initiated 10-weekly reporting. Reasons included that our PERIOD 11b followed UK's parliamentary election on 6 May 2010, and change to coalition government in the UK; but, more importantly, even in the 10 weeks of PERIOD 11a that overlapped the end of the Afghan winter, UK military fatalities in Afghanistan had averaged two per week so that, in 2010 and while in military control of Sangin, UK could expect at least as many military fatalities in 10 weeks in Afghanistan as in 20 weeks in 2006. Throughout 2010/11, we therefore made interim 10-weekly reports so that our intensity of monitoring kept pace with the intensity of combat which UK forces encountered in Afghanistan. From PERIOD 15, we reverted to 20-weekly reporting.

On 20 September 2010 (which marks the start of PERIOD 12b), UK forces in Helmand handed over responsibility for counter-insurgency operations in Sangin to US troops.

PERIOD	From	To
1	01 May 2006	17 September 2006
2	18 September 2006	04 February 2007
3	05 February 2007	24 June 2007
4 (mid-point)	25 June 2007	<b>2 September 2007</b> 11 November 2007
5	12 November 2007	30 March 2008
6	31 March 2008	17 August 2008
7	18 August 2008	04 January 2009
8	05 January 2009	17 May 2009
9 (mid-point)	18 May 2009 <i>(Afghan election: mid)</i>	<b>26 July 2009</b> 04 October 2009
10	05 October 2009	21 February 2010
11 (mid-point)	22 February 2010 <i>(UK election: 6 May)</i>	<b>2 May 2010</b> 11 July 2010
12 (mid-point)	12 July 2010 <i>(UK to US in Sangin: 20 Sept)</i>	<b>19 September 2010</b> 28 November 2010

13	29 November 2010	<b>6 February 2011</b> 17 April 2011
14	18 April 2011	<b>26 June 2011</b> 4 September 2011
15	5 September 2011	22 January 2012
16	23 January 2012	10 June 2012
17	11 June 2012	28 October 2012
18	29 October 2012	17 March 2013
19	18 March 2013	4 August 2013
20	5 August 2013	22 December 2013
21	23 December 2013	11 May 2014
22	12 May 2014	28 September 2014
23	29 September 2014	16 February 2015
24	17 February 2015	6 July 2015

## 2. Methods briefly

**We report fatality rates per 1,000 personnel-years.** Four thousand troops in a theatre of operation for 3 months contribute 1,000 personnel-years (pys). So too do 1,000 personnel in theatre for one year. Analytically, we characterise “major combat” by a military fatality rate of 6 or more per 1,000 pys.

**We analyse the lethality of IED (only) incidents.** As in Bird and Fairweather<sup>5</sup>, we exclude from this analysis multiply-ascribed deaths, such as IED and small arms fire or IED and rocket propelled grenade/grenades. A singleton fatal IED attack in Iraq during PERIOD 5 in which a suicide vehicle was used has been coded as ‘suicide bomb’ rather than IED; and similarly a suicide car bomb-IED attack in PERIOD 9 in Afghanistan. Unusually, triple hostile fire US fatalities in Afghanistan and a UK singleton SAS death in PERIOD 6 were coded as ‘explosion’; and likewise the death of a UK lance corporal in PERIOD 7. We have **not** counted them as IED deaths. In PERIOD 16, four French fatalities were shown as IED on icasualties.org but in the press as having been caused by a suicide bomber. *We assign these military deaths as caused by a suicide bomber (see <http://edition.cnn.com/2012/06/09/world/asia/afghanistan-troops-killed/index.html>).*

**We need to track changes in deployment.** In PERIOD 11a, there was some debate about the totality of UK’s deployment to Afghanistan. We continued to show UK’s deployment as 10,000 troops, although BBC’s Today programme on 14 May 2010 cited 10,500. In 2011, UK reporting has cited UK’s deployment as 9,500. We continued to use 10,000 as our reference count until PERIOD 16 when we reckoned UK troop-deployment as 9,500. From PERIOD 18, we shall count UK troops-deployment as 9,000 and US troop-deployment as 68,000, the latter coming down to US’s pre-surge level.

**History:** In PERIOD 5, UK’s deployment to Iraq reduced below 5,000 troops<sup>6-12</sup> and to Afghanistan was to have increased to 7,700, but seems to have remained at around 7,000<sup>10</sup> until PERIOD 6<sup>13-15</sup>. Withdrawal of some 20,000 US combat troops from Iraq during PERIOD 5 was announced by President Bush: we have assumed that their number has effectively stood at 155,000 throughout PERIOD 5<sup>16-19</sup> whereas US troops in Afghanistan have been reckoned at 31,000<sup>16</sup> throughout PERIOD 5. In PERIOD 6 (7), US troop numbers have been reckoned as 150,000 (149,000) in Iraq and 35,000 in Afghanistan<sup>16, 20</sup> despite some reports that both UK and US troop numbers were around 10% lower in Afghanistan<sup>21-23</sup>; and as 139,000 and 39,000 in PERIOD 8 with the UK tallies maintained as in PERIOD 7<sup>24-34</sup>. In PERIOD 9, US and UK troop numbers

have been taken as 57,000 and 9,000 respectively. By PERIOD 10, US troops were reckoned to be around 100,000 in Iraq and around 90,000 in Afghanistan after a further uplift of around 30,000 personnel was announced by President Obama

(<http://www.cnn.com/2009/POLITICS/12/01/obama.afghanistan/index.html>;  
[http://news.google.co.uk/news?hl=en&q=spectre+of+endless+wars&um=1&ie=UTF-8&ei=QIqHS9CZJoz00gS0rZDGCw&sa=X&oi=news\\_group&ct=title&resnum=1&ved=0CAsQsQQwAA](http://news.google.co.uk/news?hl=en&q=spectre+of+endless+wars&um=1&ie=UTF-8&ei=QIqHS9CZJoz00gS0rZDGCw&sa=X&oi=news_group&ct=title&resnum=1&ved=0CAsQsQQwAA)  
) following a review of military strategy in Afghanistan which was led by General Petraeus  
(<http://news.bbc.co.uk/1/hi/8527266.stm>; [http://news.bbc.co.uk/1/hi/world/south\\_asia/8389351.stm](http://news.bbc.co.uk/1/hi/world/south_asia/8389351.stm)).

Meanwhile, UK and Canadian troops had increased to 9,500 (which does not include mooted 500 “special forces”, see Straight Statistics (<http://www.straightstatistics.org/article/helicopter-numbers-do-we-have-lift>) and 2,800 respectively in Afghanistan (see CBC News, 24 February 2010: “Brace yourself, Canada, our big fight is just ahead”). Canadian troops are scheduled to have no combat role in Afghanistan beyond 2011.

### 3. Results

#### 3.1 Fatalities in Afghanistan in PERIODS 1 to 16; and in PERIOD 17

TABLE 1 summarises coalition military fatalities by nationality in Afghanistan where US personnel accounted for **49%** of all military fatalities in PERIODS 1+2+3+4 (**180/367**; 95% CI: 44% to 54%), for **52%** in PERIODS 5+6+7+8 (**220/420**; 95% CI: 48% to 57%), but for **67%** in PERIODS 9+10+11+12 (**718/1,076**; 95% CI: 64% to 70%).

In PERIODS 13+14+15+16, US personnel accounted for an even higher percentage, **74%**, of all military fatalities (596/804; 95% CI: 71% to 77%). Three large clusters, each of six US deaths - two by small arms fire and one an IED attack - occurred in PERIOD 13; three clusters in PERIOD 14, two of eight US deaths each – one by small arms fire and the other when two IEDs exploded in a single incident – and one of 30 US fatalities when a Chinook helicopter was brought down. In PERIOD 15, there was one large cluster of six US deaths in a non-hostile helicopter crash, and in PERIOD 16 an even larger cluster of 12 Turkish military fatalities in a non-hostile helicopter crash.

In PERIOD 17, US personnel accounted for **80%** of all military fatalities (**136/170**; 95% CI: 74% to 86%). There were two large clusters of fatalities: seven US personnel in hostile helicopter crash and six US troops in fatal IED (only) incident.

*Non-hostile causes:* Non-hostile causes had accounted for 88/367 fatalities in Afghanistan in the 80 weeks of PERIODS 1+2+3+4 (**24%**; 95% CI: 20% to 28%), but for 12% since, namely: for 49/420 military fatalities (**12%**; 95% CI: 8% to 15%) in PERIODS 5+6+7+8; for 114/1076 military fatalities (**11%**; 95% CI: 9% to 13%) in PERIODS 9+10+11+12\*; and for 120/804 military fatalities (**15%**; 95% CI: 12% to 17%) in PERIODS 13+14+15+16. In PERIOD 17, 23/170 (**14%**) fatalities were due to non-hostile causes.

A quarter (28) of the 114 non-hostile deaths in PERIODS 9+10+11+12 had occurred in the course of 11 helicopter (or aircraft) accident/crashes [1, 1, 1, 1, 2, 3, 3, 3, 4, 7, 9]\*; and 26/120 non-hostile deaths in PERIODS 13+14+15+16 in the course of 8 helicopter (or aircraft) accident/crashes [0; 1, 1, 1, 2; 6; 12, 2, 1]. \*See previous reports for more detail. In PERIOD 17, there were seven and two US fatalities in hostile helicopter crashes, and two Australian fatalities in a non-hostile helicopter crash.

*By nationality:* Military fatality rates in Afghanistan have been notably different by nationality, as indicated by non-overlapping 95% confidence intervals below for the first 160 weeks of **PERIODS 1 to 8**.

In the subsequent 60-weeks of **PERIODS 9+10+11**, UK and Canadian fatality rates were not differentiated. Both were very significantly higher than for US troops, for whom the overall fatality rate in PERIODS 9+10+11, although up by nearly a fifth on PERIODS 1 to 8, had remained just below the level of ‘major combat’, which we define analytically as 6 fatalities per 1,000 pys.

Important decreases in military fatality rate became evident in **PERIODS 12+13+14** for both Canadian and UK troops which, for Canadian troops, occurred from the start of PERIOD 12: see summaries below & **TABLE 1**. Change of operations resulted in a major decrease in the fatality rate of UK, but not US, troops in PERIODS 12+13+14 relative to PERIODS 9+10+11.

#### **Summary for PERIODS 1 to 8: 160 weeks**

Canadians: **13.9** per 1,000 pys (95% CI: 11 to 17, based on 103 fatalities in 7,412 pys)  
UK forces: **7.4** per 1,000 pys (95% CI: 6 to 9, based on 152 fatalities in 20,476 pys)  
US forces: **4.4** per 1,000 pys (95% CI: 4.0 to 4.9, based on **400** fatalities in 89,965 pys)

#### **Summary for PERIODS 9+10+11: 60 weeks**

Canadians: **10.3** per 1,000 pys (95% CI: 7 to 15, based on 32 fatalities in 3,116 pys)  
UK forces: **14.1** per 1,000 pys (95% CI: 12 to 16, based on 155 fatalities in 10,962 pys)  
US forces: **5.3** per 1,000 pys (95% CI: 4.8 to 5.8, based on **484** fatalities in 91,154 pys)

#### **Summary for PERIOD 12+13+14: 60 weeks**

Canadians: **1.9** per 1,000 pys (95% CI: 0.7 to 4.0, based on 6 fatalities in 3,231 pys)  
UK forces: **5.7** per 1,000 pys (95% CI: 4.3 to 7.1, based on 66 fatalities in 11,538 pys)  
US forces: **5.6** per 1,000 pys (95% CI: 5.2 to 6.1, based on **585** fatalities in 103,848 pys)

#### **Summary for PERIOD 15+16+17: 60 weeks**

UK forces: **4.9** per 1,000 pys (95% CI: 3.6 to 6.2, based on 55 fatalities in 11,154 pys)  
US forces: **3.8** per 1,000 pys (95% CI: 3.4 to 4.2, based on **381** fatalities in 99,298 pys)

From 2009 to 2012, see **TABLE 1b**, there have been progressive, significant reductions in the combined US/UK/Canadian military fatality rate during 20-week ‘fighting seasons’ from:

**9.8** (95% CI: 8.5 to 10.9, based on **257** fatalities in 26,347 pys, see PERIOD 9 in 2009) to  
**7.6** (95% CI: 6.7 to 8.4, based on **299** fatalities in 39,539 pys, see PERIOD 11b+12a in 2010)  
to  
**5.9** (95% CI: 5.1 to 6.7, based on **281** fatalities in 39,539 pys, see PERIOD 14) in 2011  
**4.6** (95% CI: 3.8 to 5.3, based on **154** fatalities in 33,720 pys, see PERIOD 17) in 2012.



### **3.2 Fatal IED (only) incidents: variations and versus Green-on-Blue fatal incidents**

**TABLE 2** shows military fatalities in IED (only) incidents, hereafter IED incidents, in Afghanistan. Lethality per fatal IED incident in PERIODS 5+6+7+8 was 216 fatalities in 144 fatal IED incidents in Afghanistan, a mean of 1.5 deaths per fatal IED (only) incident {sd = 0.83}, and consistent with Iraq. The proportion of hostile deaths due to fatal IED (only) incidents was **58%** (216/371; 95% CI: 53% to 63%).

In the 80 weeks of PERIODS 9+10+11+12, fatal IED (only) incidents nearly tripled to 94+89+101+112 = 396 fatal IED incidents (0.71 per day). These 396 fatal IED incidents cost the lives of 136+120+129+160 = 545 military personnel, a mean of 1.4 deaths per fatal IED (only) incident. The proportion of hostile deaths due to fatal IED (only) incidents was **57%** (545/962; 95% CI: 53% to 60%).

In the 80 weeks of PERIODS 13+14+15+16 (29 November 2010 to 10 June 2012), 241 fatal IED (only) incidents cost the lives of 333 military personnel, a mean of 1.4 deaths per fatal IED (only) incident. The proportion of hostile deaths due to fatal IED (only) incidents was lower at **49%** (333/684; 95% CI: 45% to 53%).

In the 20 weeks of PERIOD 17, 32 fatal IED (only) incidents cost the lives of 46 military personnel, a mean of 1.4 deaths per fatal IED (only) incident. The proportion of hostile deaths due to fatal IED (only) incidents was lower still at **31%** (46/147; 95% CI: 24% to 39%).

The proportion of fatal IED (only) incidents which claimed *more than two military lives* declined to **one in 13** in PERIODS 9 to 16 (49/637, 95% CI: 5.6% to 9.8%), as follows: PERIODS 5+6+7+8 (18/144, 12.5%), PERIODS 9+10+11+12 (29/396, 7%), PERIODS 13+14+15+16 (20/241, 8%). **Consistently, in PERIOD 17, 2/32 fatal IED (only) incidents claimed more than two military lives.**

By contrast, **TABLE 2** shows that the proportion of all 45 fatal Green-on-Blue incidents since 1 January 2008 that claimed *more than two military lives* was significantly higher at around **one in four** (12/45, 95% CI: 13% to 40%).

#### ***Small arms fire and Green-on-Blue fatalities***

For context, note that, in PERIODS 13+14+15+16+17, friendly-fire or drone fire accounted for seven ISAF-fatalities (1 Italian, 1UK, 2US-drone-fire, 1French, 1NZ, 1US).

Fatalities from small arms fire (other than friendly-fire) were as follows:

- 32 in PERIOD 13, which included two clusters, each of six US deaths (at Konar and Nangarhar);
- 31 in PERIOD 14a, which included a large cluster of eight fatalities at Kabul International Airport (where an Afghan military pilot murdered 8 US personnel) and two US fatalities at the Afghan National Civil Order Police Compound;
- 19 in PERIOD 14b, and one from 'saf and RPG';
- 39 in PERIOD 15, and one from 'saf and RPG';
- 31 in PERIOD 16;
- 54 in PERIOD 17, & one each from 'saf – suicide', 'saf+RPG'; three from 'saf+IED'

Thus, of all 689 hostile deaths in PERIODS 13+14+15+16, a fifth (152, 22%) were specifically from small arms fire (only), 41 of them apparently during incidents of anger or treachery by Afghan personnel (as detailed in **Appendix**): that is 41/689 hostile deaths (6%), and 41/152 deaths by small arms fire (27%, 95% CI: 20% to 34%).

In PERIOD 17, after reconciliation between LWJ and icasualties.org, see **Appendix**, a third of 147 hostile death (54/147, 37%) were specifically from small arms fire (only), 28 of them Green-on-Blue fatalities, that is: 28/147 hostile deaths (19%), and 28/54 deaths by small arms fire (52%, 95% CI: 38% to 65%), significantly higher proportions than in PERIODS 13+14+15+16.

#### 4. Main discussion

*While UK troops serve in Afghanistan along-side ISAF-trained ANA troops, there is an obligation on the UK government to know, and be transparent about, the level of combat that ISAF-trained, deployed ANA forces encounter, and how their fatality-rate compares with that of troops from ISAF-nations, such as UK. This obligation is strengthened because, in the 80 weeks of PERIODS 13+14+15+16 when there were 804 ISAF-fatalities in Afghanistan, apparent treachery by Afghan personnel or trainees claimed at least 42 ISAF-lives (all by small arms fire), and so caused 5% of all deaths; and accounted for 42/152 (27%) deaths by small arms fire.*

***Worse, in PERIOD 17, Green-on-Blue fatalities accounted for 28 of all 170 deaths (16%); for 28/147 hostile deaths (19%); and for 28/54 (52%) of deaths by small arms fire.***

*Even without access to ANA deployment and fatalities, and hence without appraisal of the wider context, the nature of ISAF- fatalities has clearly altered, now that ‘withdrawal’ is out in the open. As we progress towards 2013 and 2014, we remain concerned by acts of ‘individual treachery’ directed at the military personnel from all (or specific) ISAF-countries, and by the potential for suicide bombings also to be directed at more senior ranks.*

*Fatal IED-only versus fatal Green-on-Blue incidents: Only one in thirteen (49/637, 95% CI: 5.6% to 9.8%) of fatal IED (only) incidents in PERIODS 9 to 16 claimed more than two military lives. But, as **TABLE 2** shows, the distribution of deaths-per-fatal-Green-on-Blue incident is very different. In particular, a substantially higher proportion, around one in four, of the 45 fatal G-on-B incidents from 1 January 2008 to 28 October 2012 claimed more than two military lives (12/45, 95% CI: 13% to 40%).*

Afghan civilians are less likely to be the inadvertent victims of G-on-B attacks than of IED incidents and, when Green-on-Blue attacks are pre-meditated, the perpetrator can choose when to fire - and on whom - so that he maximizes his own chance of escape or the number of his victims. The high proportion – at least half - of fatal Green-on-Blue attacks that result in more than one fatality (28/45, 95% CI: 48% to 76%) argues strongly against a mere clash of cultures or sporadic outburst between assailant and provocateur.

Some of these acts of treachery (Green-on-Blue) could be the result of individual disillusionment, but their being part of a strategically directed campaign is now well-supported by evidence, namely: on the multiplicity of fatalities per G-on-B fatal incident, in which too seldom is there one victim only. When many fatalities occur in a single

incident, they lead to questioning by ISAF-nations of their continued role in Afghanistan, as by France<sup>41</sup>.

It is intriguing, but may be coincidental, that, just as Green-on-Blue attacks have increased, the number of ISAF's IED-only fatalities has decreased – and done so even during the fighting season, which PERIOD 17 is. The explanation may simply be that patrols are increasingly led by ANA troops and, if so, their IED-fatalities could have increased as those for ISAF personnel have decreased. However, as ANA fatalities are not reported anywhere near as comprehensively as for ISAF personnel, we cannot confirm this conjecture.

If coincidence or coincidental transfer of patrol-leadership were not the reason for the down-turn in ISAF's IED-only fatalities, then we should have to consider that IED-supply routes to the Taliban may have been significantly disrupted, or their funds curtailed, so that the Taliban, needs must, have recourse to expending their people in G-on-B attacks rather than their dollars on IEDs. The Long War Journal (LWJ) includes descriptions of effective retaliation by ISAF-troops: so that G-on-B attackers certainly cannot guarantee either to survive or to escape the legal consequences of their treachery.

*Afghan National Army:* Our continued refrain is that public monitoring is needed of the numbers of the Afghan National Army's (ANA) ISAF-trained personnel deployed; and their fatalities. We look to UK Ministers - apparently in vain despite so many treacherous G-on-B incidents - to win the necessary political battles to ensure that we, the British public, are properly informed about how ISAF-trained Afghan forces fare on operations. Such reporting is essential for proper accountability by both UK and Afghan governments.

If UK government will not assist, perhaps UK journalists can - by arranging to report, as Quentin Sommerville did so poignantly, on the weekly roll-call of the Afghan as well as ISAF dead at ISAF's HQ in Kabul.

## **5. Other discussion points**

*1. Deaths of UK's presumed EOD personnel in 201+2012:* In early February 2011, there was a welcome announcement that UK army commanders were planning to change bomb disposal tactics in Afghanistan to favour destruction rather than 'exploitation' of IEDs<sup>38</sup>.

We have continued to monitor deaths by cause of UK's presumed EOD personnel in 2011 and up to 28 October 2012, as a new trend might emerge. There were three IED-fatalities among presumed EOD personnel when 6.5 would have been expected (that is:  $9/55 * 40$ ) had the EOD-2010-rate (9/55) applied to the 40 IED-only UK fatalities during 2011 up to 28 October 2012: encouraging but not statistically definitive.

*2. Surge of US troops, and current draw-down.* In Afghanistan, quite substantial winter-related decreases in military fatality rates were evident pre-surge, see PERIODS 2 and 5; and have continued, see 30-week summaries in **TABLE 1b** and **TABLE 1c** for PERIOD 15. However, there is now clear evidence that the US troop surge and re-deployments have coincided with a very significantly reduced combined US/UK/Canadian military fatality rates across the

‘fighting seasons’ of 2009 to 2012: from **9.8** (95% CI: 8.5 to 10.9) in 2009 to **7.6** (95% CI: 6.7 to 8.4) in 2010 and further reduced to **5.9** (95% CI: 5.1 to 6.7) per 1,000 personnel-years in 2011 and to **4.6** (95% CI: 3.8 to 5.3) in 2012. The UK and Canadian forces, which hitherto had faced the worst odds, benefitted from the re-deployments while the US troops took more strain. For UK troops, mainly in Helmand province, the recent draw-down of US personnel may herald an upturn in UK fatality-rates in forthcoming periods.

*3. Differential provincial deployment of US troops.* Following US operational changes during PERIODS 9+10, the observed deaths of US personnel have been consistent with a common-provincial-distribution of US military fatalities across PERIODS 11+12, and - but for the large cluster of 30 Chinook fatalities in Wardak – in PERIOD 13+14+15+16 too. In PERIODS 11 to 16, half of US fatalities (510/994; 95% CI: 48% to 55%) occurred elsewhere than in Helmand/Kandahar.

Location of US military fatalities	Helmand	Kandahar	Elsewhere in Afghanistan/NA	US TOTALS
PERIOD 9	39	18	127	<b>184</b>
PERIOD 10	43	35	58	<b>136</b>
PERIOD 11	51	20	83	<b>164</b>
PERIOD 12	84	48	102	<b>234</b>
PERIOD 13	40	24	72	<b>136</b>
PERIOD 14	46	43	126 <sup>30H</sup>	<b>215<sup>30H</sup></b>
PERIOD 15	36	31	58	<b>125</b>
PERIOD 16	25	26	69	<b>120</b>
PERIOD 17	18	39	79	<b>136</b>
PERIOD 18				

*Helmand:* In PERIOD 11b+12a, there were some 20,000 US troops in Helmand who outnumbered UK military personnel in Afghanistan by 2:1, and there were 90 US fatalities in Helmand versus 55 UK deaths in Afghanistan – fatality rates being therefore comparably high.

After UK handed-over responsibility for counter-insurgency operations in Sangin, we note that UK’s military fatality rate in Afghanistan and that of US troops in Helmand have both been below the level of major combat (**6.0** per 1,000 pys). However, PERIOD 17’s draw-down of US troops may have implications for Helmand specifically and so we cannot assume that a roughly 2:1 ratio applied throughout PERIOD 17 for US in Helmand: UK personnel.

PERIOD 12b+13+14+15+16 (post-handover)

US in Helmand: 5.4 per 1,000 pys (95% CI: 4.6 to 6.1, based on 186 fatalities in 34,614 pys)  
 UK troops: 4.7 per 1,000 pys (95% CI: 3.6 to 5.7, based on 80 fatalities in 17,115 pys)

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**TABLE 1a** (Afghanistan): Coalition military deaths in Afghanistan and estimated fatality rates per 1,000 personnel-years in consecutive 140-day periods

Theatre	Afghanistan							
Period	1	2	3	4	5	6	7	8
Dates	1 May 2006 to 17 Sept 2006	18 Sept 2006 to 4 Feb 2007	5 Feb 2007 to 24 June 2007	25 June 2007 to 11 Nov 2007	12 Nov 2007 to 30 Mar 2008	31 Mar 2008 to 17 Aug 2008	18 Aug 2008 to 4 Jan 2009	5 Jan 2009 to 17 May 2009
Total fatalities (non-hostile)	117 ( 41)	40 ( 4)	96 ( 27)	114 ( 16)	59 ( 10)	136 ( 20)	123 ( 6)	102 ( 13)
US deaths* (troops) personnel-years	54 (23,300) <b>8,962</b>	18 (22,000) <b>8,462</b>	50 (24,800) <b>9,538</b>	58 (25,000) <b>9,615</b>	25 (31,000) <b>11,923</b>	88 (35,000) <b>13,425</b>	53 (35,000 or 31,000 <sup>21</sup> ) <b>13,425</b>	54 (39,000) <b>14,615</b>
UK deaths (troops) personnel-years	33*** (4,500) <b>1,726</b>	6 (up to 5,250) <b>2,014</b>	15 (5,250 to 6K to 6,900) <b>2,186</b>	22 (6,900) <b>2,654</b>	8 (7,000) <b>2,692</b>	24 (8,000) <b>3,068</b>	23 (8K or 7,300) <b>3,068</b>	21 (8,000) <b>3,068</b>
Canadian deaths (troops) personnel-years	17 (2,250) <b>865</b>	12 (2,250) <b>865</b>	16 (2,500) <b>962</b>	11 (2,500) <b>962</b>	10 (2,500) <b>962</b>	9 (2,500) <b>962</b>	16 (2,500) <b>962</b>	12 (2,500) <b>962</b>
Other deaths	13	4	15	2	16	15	31**	15
<i>Estimated fatality rates per 1,000 personnel-years (95% Poisson uncertainty)</i>								
US	6 (4.6 to 7.9)	2 (1.3 to 3.4)	5 (3.8 to 6.7)	6 (4.5 to 7.6)	2.1 (1.3 to 2.9)	6.6 (5.2 to 7.9)	4.0 <sup>@</sup> (2.9 to 5)	3.7 (2.7 to 4.7)
UK	19 (13 to 27)	3 (1 to 6)	7 (4 to 11)	8 (5 to 11)	3 (1 to 6)	8 (5 to 11)	7 <sup>@</sup> (5 to 11)	7 (4 to 10)
Canada	20 (11 to 31)	14 (7 to 24)	17 (9 to 27)	9 (3 to 16)	10 (5 to 19)	9 (3 to 16)	17 (9 to 27)	12 (6 to 22)
UK/Canada	19 (14 to 25)	6 (4 to 11)	10 (7 to 14)	8.2 (5.4 to 11)	4.9 (2.9 to 7.8)	8.2 (5.4 to 11)	9.7 (7 to 13)	8.2 (5.6 to 11)
<b>US/UK/Canada</b>	<b>9.0</b> (7 to 11)	<b>3.2</b> (2 to 4)	<b>6.4</b> (5 to 8)	<b>6.9</b> (5.5 to 8.3)	<b>2.8</b> (1.9 to 3.6)	<b>6.9</b> (5.7 to 8.2)	<b>5.3</b> (4.2-6.3)	<b>4.7</b> (3.7 to 5.6)

\* For PERIODS 1- 4, US deployments were ascertained retrospectively from Department of Defense Active Duty Military Personnel Strengths (309A): with acknowledgement to Olivier Grouille, RUSI.

\*\* includes large cluster of 10 French fatalities in hostile fire

\*\*\* large cluster of 14 Nimrod deaths

@ US fatality rate in Afghanistan in PERIOD 7 would be 4.4 (3.2 to 5.6) and UK rate would be 8 (5 to 12) if their troop numbers were 31,000 {and hence 11,923 pys} and 7,300 {and hence 2,808 pys} rather than as shown in Table 1.

**TABLE 1b** (Afghanistan): Coalition military deaths in Afghanistan and estimated fatality rates per 1,000 personnel-years in consecutive 70-day (a/b) or 140-day periods.

Theatre	Afghanistan – Periods a or b are 70 days' duration, not 140 days							
Period	9 <b>UPLIFT</b>	10 <b>SURGE</b>	11a <b>SURGE</b>	11b <b>SURGE</b>	12a <b>SURGE</b>	12b <b>SURGE</b>	13 <b>SURGE</b>	14 <b>SURGE</b>
Dates	18 May 2009 to 4 Oct 2009	5 Oct 2009 to 21 Feb 2010	22 Feb 2010 to 2 May 2010	3 May 2010 to 11 July 2010	12 July 2010 to 19 Sept 2010	20 Sept 2010 to 28 Nov 2010	29 Nov 2010 to 17 April 2011	18 April 2011 to 4 Sept 2011
Total fatalities (non-hostile)	293 ( 33)	213 ( 25 <sup>1H</sup> )	79 ( 9 <sup>4H/A</sup> )	182 (20 <sup>4H</sup> )	165 ( 9 <sup>H</sup> )	144 ( 18 <sup>9H</sup> )	179 ( 21 <sup>0H</sup> )	286 (35 <sup>5H+1FF</sup> )
US deaths* (troops) <b>personnel- years</b>	<b>184</b> (57,000) <b>21,923</b>	<b>136</b> (90,000) <b>34,615</b>	<b>47</b> (90,000) <b>17,308</b>	<b>117</b> (90,000) <b>17,307</b>	<b>117</b> (90,000) <b>17,308</b>	<b>117</b> (90,000) <b>17,308</b>	<b>136</b> (90,000) <b>34,616</b>	<b>215</b> <sup>1civilian+30H</sup> ( 90,000) <b>34,616</b>
UK deaths (troops) <b>personnel- years</b>	60 ( 9,000) <b>3,462</b>	44 ( 9,500) <b>3,654</b>	19 ( 10,000) <b>1,923</b>	32 ( 10,000) <b>1,923</b>	23 ( 10,000) <b>1,923</b>	8 ( 10,000) <b>1,923</b>	18 ( 10,000) <b>3,846</b>	17 ( 10,000) <b>3,846</b>
Canadian deaths (troops) <b>personnel- years</b>	13 ( 2,500) <b>962</b>	9 ( 2,800) <b>1,077</b>	2 ( 2,800) <b>538</b>	8 ( 2,800) <b>539</b>	2 ( 2,800) <b>538</b>	0 ( 2,800) <b>539</b>	2 ( 2,800) <b>1,077</b>	2 ( 2,800) <b>1,077</b>
Other deaths	36	24	11	25	23	19	23	52 <sup>1=NATO</sup>
<i>Estimated fatality rates per 1,000 personnel-years (95% Poisson uncertainty)</i>								
US	<b>8.4</b> (7.2 to 9.6)	<b>3.9</b> (3.3 to 4.6)	<b>2.7</b> (1.9 to 3.5)	<b>6.8</b> (5.5 to 8.0)	<b>6.8</b> (5.5 to 8.0)	<b>6.8</b> (5.5 to 8.0)	<b>3.9</b> (3.3 to 4.6)	<b>6.2</b> <sup>30H</sup> (5.4 to 7.0)
		30 weeks: <b>3.5</b> (3.0 to 4.0)		<b>6.8</b> (5.9 to 7.6)		30 weeks: <b>4.9</b> (4.3 to 5.5)		
UK	17.3 (13 to 22)	12.0 ( 8 to 16)	9.9 ( 6 to 15)	16.6 (11 to 25)	12.0 ( 8 to 18)	4.2 ( 2 to 8)	4.7 (2.9 to 7.5)	<b>4.4</b> (2.6 to 7.1)
		30 weeks: <b>11.3</b> (8.5 to 14.1)		<b>14.3</b> (10.8 to 18.6)		30 weeks: <b>4.5</b> (2.9 to 6.6)		
Canada	13.5 ( 7 to 23)	8.4 ( 4 to 16)	3.7 (0.5 to 13)	14.8 ( 6 to 29)	3.7 (0.5 to 13)	30 weeks: <b>1.2</b> (0.1 to 4.5)		<b>1.9</b> (0.2 to 6.7)
		30 weeks: <b>4.3</b> (3.8 to 4.9)		<b>9.3</b> (4.4 to 17)				
US/UK/ Canada	<b>9.8</b> (8.5-10.9)	<b>4.8</b> (4.1 to 5.5)	<b>3.4</b> (2.6 to 4.3)	<b>7.9</b> (6.7 to 9.2)	<b>7.2</b> (6.0 to 8.4)	<b>6.3</b> (5.2 to 7.4)	<b>3.9</b> (3.3 to 4.6)	<b>5.9</b> (5.1 to 6.7)
		30 weeks: <b>4.3</b> (3.8 to 4.9)		<b>7.6</b> (6.7 to 8.4)		30 weeks: <b>4.7</b> (4.2 to 5.3)		

<sup>1H</sup> Total of 25 non-hostile deaths in PERIOD 10 includes 11 US fatalities (7+4) in two helicopter crashes.

<sup>4H</sup> /A PERIOD 11a includes 4 US fatalities (3+1) in helicopter + aircraft crashes.

<sup>4H</sup> PERIOD 11b includes 3 Australian + 1US fatalities (3+1) in 2 helicopter crashes.

<sup>1H</sup> PERIOD 12a includes 1 UK fatality in a helicopter accident.

<sup>9H</sup> PERIOD 12b includes cluster of 9 US fatalities in a helicopter crash.

<sup>5H</sup> PERIOD 14a includes 5 deaths in 4 non-hostile helicopter crashes (1France, 2US, 1 Austral, 1US).

<sup>30H</sup> PERIOD 14b includes major cluster of 30 US fatalities in hostile-fire Chinook helicopter crash in Wardak.



**TABLE 1c** (Afghanistan): Coalition military deaths in Afghanistan and estimated fatality rates per 1,000 personnel-years in consecutive 140-day periods.

Theatre	<b>Afghanistan</b> – Periods are 140 days' duration						
Period	<b>15</b> <b>SURGE</b>	<b>16</b> <b>SURGE</b>	<b>17</b> <b>DRAW-DOWN</b>				
Dates	5 Sept 2011 to 22 Jan 2012	23 Jan 2012 to 10 June 2012	11 June 2012 to 28 Oct 2012				
Total fatalities (non-hostile)	173 <sup>2FF</sup> (23 <sup>6H</sup> )	166 (41 <sub>12H+2H+1A</sub> )	170 (23 <sup>2H</sup> )				
US deaths* (troops) personnel-years	125 <sup>6H+1H</sup> (90,000) <b>34,616</b>	120 <sup>2H+1A</sup> (90,000) <b>34,616</b>	136 <sup>7H+2H</sup> (88,000 to 68,000**) <b>30,066</b>				
UK deaths (troops) personnel-years	15 (10,000) <b>3,846</b>	22 ( 9,500) <b>3,654</b>	18 ( 9,500) <b>3,654</b>				
Canadian deaths (troops) personnel-years	1 ( 2,800) <b>1,077</b>	0	0				
Other deaths	32 <sup>6=NATO</sup>	24 <sup>3=NATO</sup>	16 <sup>2=NATO</sup>				
US	<b>3.6</b> (3.0 to 4.2)	<b>3.5</b> (2.8 to 4.1)	<b>4.5</b> (3.7 to 5.3)				
UK	<b>3.9</b> (2.2 to 6.4)	<b>6.0</b> (3.5 to 8.8)	<b>4.9</b> (2.9 to 7.8)				

Total of 23 non-hostile deaths in PERIOD 15 includes 6 US fatalities in a single helicopter crash; and 2 Australian fatalities in single non-hostile helicopter crash in PERIOD 17

\*\* counted as 88K, 86K, 84K, then 68K, 68K

**TABLE 2a** (Afghanistan): IED (only) fatalities in Afghanistan

Theatre	<b>Afghanistan</b>								
Period	Baseline (A)	3	4	5	6	7	8	9	10
Dates	<b>1 Oct 2001 to 4 Feb 2007</b>	5 Feb 2007 to 24 June 2007	25 June 2007 to 11 Nov 2007	12 Nov 2007 to 30 Mar 2008	31 Mar 2008 to 17 Aug 2008	18 Aug 2008 to 4 Jan 2009	5 Jan 2009 to 17 May 2009	18 May 2009 to 4 Oct 2009	5 Oct 2009 to 21 Feb 2010
Duration	<b>1,953 days</b>	140 days	140 days	140 days	140 days	140 days	140 days	140 days	140 days
Deaths in fatal IED incidents	<b>76 in 46 fatal IEDs</b>	22 in 12 fatal IEDs	44 in 27 fatal IEDs	37 in 29 fatal IEDs	62 in 39 fatal IEDs	62 in 42 fatal IEDs	55 in 34 fatal IEDs	136 in 94 fatal IEDs	120 in 89 fatal IEDs
<b>Number of fatalities in a fatal IED incident</b>									
<i>Fatalities, x, in IED incident</i>	<i>By period: frequency of fatal IED incidents with x fatalities</i>								
<i>1</i>	<b>28</b>	8	19	22	25	29	20	71	70
<i>2</i>	<b>11</b>	1	3	6	8	7	9	11	13
<i>3</i>	<b>2</b>	2	3	1	3	5	3	7	3
<i>4</i>	<b>5</b>	0	1		3	1	2	4	2
<i>5</i>	<b>0</b>	0	0					0	
<i>6+</i>	<b>0</b>	1	1					1	1*
TOTAL fatal IED incidents	<b>46</b>	12	27	29	39	42	34	94	89
Fatal IED incidents per day	<b>0.02</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.7</b>	<b>0.6</b>
Mean deaths per fatal IED incident	<b>1.7</b>	<b>1.8</b>	<b>1.6</b>	<b>1.3</b>	<b>1.6</b>	<b>1.5</b>	<b>1.6</b>	<b>1.45</b>	<b>1.35</b>

\* Seven fatalities in apparently a single IED incident – the highest per-incident toll in Afghanistan to date.

**TABLE 2b** (Afghanistan): IED (only) fatalities in Afghanistan

Theatre	Afghanistan								
Period	9+10	11a	11b	12a	12b	13	14	15	16
Dates	<b>18 May 2009 to 21 Feb 2010</b>	22 Feb 2010 to 2 May 2010	3 May 2010 to 11 July 2010	12 July 2010 to 19 Sept 2010	20 Sept 2010 to 28 Nov 2010	29 Nov 2010 to 17 April 2011	18 April 2011 to 4 Sept 2011	5 Sept 2011 to 22 Jan 2012	23 Jan 2012 to 10 June 2012
Duration	<b>280 days</b>	70 days	70 days	70 days	70 days	140 days	140 days	140 days	140 days
Deaths in fatal IED incidents	<b>256 in 183 fatal IEDs</b>	34 in 31 fatal IEDs	95 in 70 fatal IEDs	88 in 58 fatal IEDs	72 in 54 fatal IEDs	83 in 66 fatal IEDs	122 in 87 fatal IEDs	73 in 46 fatal IEDs	55 in 42 fatal IEDs
<b>Number of fatalities in a fatal IED incident</b>									
<i>Fatalities, x, in IED incident</i>	<i>By period: frequency of fatal IED incidents with x fatalities</i>								
1	<b>141</b>	28	51	38	41	55	70	28	32
2	<b>24</b>	3	16	15	10	8	9	12	7
3	<b>10</b>	0	1	1	1	2	3	4	3
4	<b>6</b>	0	1	3	2		3	1	0
5	<b>0</b>	0	1	1	0		1	1	0
6+	<b>2*</b>	0	0	0	0	1	1	0	0
TOTAL fatal IED incidents	<b>183</b>	31	70	58	54	66	87	46	42
Fatal IED incidents per day	<b>0.65</b>	<b>0.4</b>	<b>1.0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.5</b>	<b>0.6</b>	<b>0.3</b>	<b>0.3</b>
Mean deaths per fatal IED incident	<b>1.4</b>	<b>1.1</b>	<b>1.4</b>	<b>1.5</b>	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>	<b>1.6</b>	<b>1.3</b>

Consistent with our methodology<sup>5</sup>, excluded from the above analysis of PERIOD 9 are 11 multiply-ascribed IED-related deaths in four IED + small arms fire incidents (2, 1, 2, 1 fatalities) and in three IED + rocket propelled grenade incidents (1, 1, 3 fatalities). In PERIOD 11b, there were two IED+RPG incidents (1, 1). In PERIOD 12a, there was one New Zealand fatality in an IED+RPG+small arms fire incident. In PERIOD 12b, there was one US fatality and four Italian fatalities in two separate IED attack+small arms fire incidents. In PERIOD 13, there was one US fatality in IED+saf, and 2 US personnel died in an IED+RPG attack.

**TABLE 2c** (Afghanistan): IED (only) fatalities in Afghanistan; and **Green-on-Blue (G-on-B) fatalities** since 1 January 2008.

Theatre	Afghanistan							
Period	9+10+11+12	13+14+15+16	17	18	19	20	21	G-on-B
Dates	18 May 2009 to 28 Nov 2010	29 Nov 2010 to 10 June 2012	11 June 2012 to 28 Nov 2012	29 Oct 2012 to 17 Mar 2013	18 Mar 2013 to 4 Aug 2013	5 Aug 2013 to 22 Dec 2013	23 Dec 2013 to 11 May 2014	1 Jan 2008 to 28 Oct 2012
Duration	560 days	560 days	140 days	140 days	140 days	140 days	140 days	1763 days
Deaths in fatal IED incidents	545 in 396 fatal IEDs	333 in 241 fatal IEDs	46 in 32 fatal IEDs					97 G-on-Bs in 45 fatal G-on-B incidents, {13}/45 in PERIOD 17
<b>Number of fatalities in a fatal IED incident</b>								
<i>Fatalities, x, in IED/ G-on-B incident</i>	<i>By period: frequency of fatal IED/Green-on-Blue incidents with x fatalities</i>							
1	299	185	23					17 {4}
2	68	36	7					16 {4}
3	13	12	1					7 {4}
4	12	4	0					2 {1}
5	2	2	0					1
6+	2*	2	1					2 [6, 8]
TOTAL fatal IED/ G-on-B incidents	396	241	32					45
Fatal IED/ G-on-B incidents per day	0.71	0.43	0.2					0.03 [27 in 2012 ⇔ 0.1 per day]
Mean deaths per fatal IED incident	1.4	1.4	1.3					2.2

## APPENDIX for REFERENCE on AFGHANISTAN

### 3.3 Explosive Ordnance Disposal and IEDs.

Below we list UK military fatalities since 1 May 2006 whose regiment/unit suggests to us that they may have served as explosives experts. We list these 22 men by date and cause of death, rank, surname and regiment with a further 12 listed whose duties just possibly included Explosive Ordnance Disposal (EOD). In addition, we list the death of dog-handler Lance Corporal Liam Richard Tasker of the Royal Army Veterinary Corps.

Deciding whether to detonate or dismantle a detected IED is influenced by the need to prevent casualties to military personnel or civilians, likely damage to property, the desire to track whether bomb-makers' materials or techniques have changed, and professional curiosity. However, unless bomb-makers alter their techniques and sources with high frequency, the learning to be gained from dismantling must be weighed against the risk to EOD personnel whose lives and skills we can ill afford to expend, and who may be vulnerable to hostile fire while they work. In the week when the Truro coroner's inquiry into the death of Staff Sergeant Olaf Schmidt, who was awarded the George Cross, reached its verdict of unlawful killing<sup>37</sup> (verdict: 11 February 2011, date of death: 31 October 2009), Sean Rayment reported that army commanders are planning to change bomb disposal tactics in Afghanistan "to destroy rather than exploit" IEDs<sup>38</sup>. Exploitation refers to the intelligence gained about bomb makers' tactics from the dismantling of IEDs.

By calendar year, the following table summarises IED-only fatalities (by our definition) that occurred among UK military personnel together with i) hostile deaths by any cause and ii) IED-only fatalities among UK's presumed EOD personnel. The data display a significantly enhanced rate of i) hostile deaths for UK's presumed EOD personnel in 2010 (chi-square on 2 degrees of freedom of 11.2,  $p < 0.01$ ); and also ii) when particularised to IED-only fatalities (chi-square on 2 degrees of freedom of 6.06,  $p < 0.05$ ).

IED-only fatalities among UK's presumed EOD personnel had increased *more than* the rate at which UK's IED-only fatalities increased – when we might have expected them to hold steady, precisely because the dismantling of a threshold number of IED for learning purposes can be achieved via a higher detonation rate when there are more IEDs to deal with. Instead, we see that presumed EOD personnel were 1/43 (2%) and 4/76 (5%) of UK's IED-only fatalities in 2006-2008 and 2009 respectively, **but 9/55 (16%)** in 2010.

**Has a different pattern been established since 2011?** Notice first that there has been a very marked reduction overall in UK's IED-only fatalities compared to 2010 which, paradoxically, makes it harder to answer the question authoritatively.

Had the 2010 pattern persisted throughout 2011 and into 2012, we should have expected 6.5 IED-only deaths of UK presumed EOD personnel: thankfully, we have observed only three (1-directional test,  $p < 0.11$ ). The three, as observed, are consistent with expectation based on all five preceding years: 2006 to 2010.

Had the pattern of hostile deaths in presumed EOD personnel persisted as in 2010, we should have expected 8.3 hostile deaths in UK's presumed EOD personnel: we have observed five (at most six). The data since 2011 are encouraging but not yet definitive in a statistical sense that the changed policy has importantly reduced the fatal IED risks faced by presumed EOD personnel.

Calendar year	UK IED-only fatalities	i) Hostile death of UK presumed EOD personnel {expectations by trend in IED-only fatalities}	ii) IED-only deaths of UK presumed EOD personnel {expectations by trend in IED-only fatalities}
2006+2007+2008	1+12+30 = 43	1 {4.20}	1 {3.46}
2009	76	4 {7.43}	4 {6.12}
2010	55	12 {5.37}	9 {4.42}
Total	174	17 chi-square on 2df = 12.2, $p < 0.01$	14 chi-square on 2df = 7.2, $p < 0.05$
<b>Did a new pattern emerge in 2011?</b>			

2011	27	2 (or 3 = dog-handler)	2
2012 to 28 Oct	13	3	1

Date of death	Cause of death	Rank	Surname	Regiment
21 Sept 2012	NH: saf suicide	Captain	Townley	28 Engineer Regiment attached to 21 Engineer Regiment
4 May 2012	Indirect fire	Private	Silibaravi	Royal Logistics Corps
4 May 2012	Indirect fire	Corporal	Roberts	Royal Logistics Corps
18 April 2012	IED attack	Sapper	Ray	33 Engineer Regiment (EOD)
8 Dec 2011	IED attack	Sapper	Bond	35 Engineer Regiment, Royal Engineers
19 April 2011	IED attack	Captain	Head	321 EOD Squadron
1 March 2011	Small arms fire	Lance Corporal	Tasker	Royal Army Veterinary Corps
14 Feb 2011	NH – fire	Private	Hutchinson	Royal Logistics Corps
14 Feb 2011	NH – fire	Private	Wood	Royal Logistics Corps
28 Dec 2010	IED attack	Warrant Off 2	Wood	Royal Logistics Corps, 23 Pioneer Regiment
30 Oct 2010	Hostile fire	Sapper	Blanchard	Engineer Regiment (EOD)
19 Oct 2010	IED attack	Acting Corporal	Barnsdale	33 Engineer Regiment (EOD)
18 Sept 2010	IED attack	Sergeant	Jones	Royal Engineers
26 July 2010	IED attack	Sapper	Smith	36 Engineer Regiment
17 July 2010	IED attack	Staff Serg.	Linley	Royal Logistic Corps: 11 EOD* Regiment
27 June 2010	Small arms fire	Corporal	Kirkpatrick	101 Engineer Regiment (EOD)
3 May 2010	NH* vehicle accident	Lance Corporal	Buxton	21 Engineer Regiment
3 May 2010	IED attack	Sapper	Roy	21 Engineer Regiment
26 Feb 2010	IED attack	Not reported	Fox	28 Engineer Regiment
15 Feb 2010	IED attack	Sapper	Mellors	36 Engineer Regiment: Counter-IED Task Force
8 Feb 2010	IED attack	Warrant Off. 2	Markland	36 Engineer Regiment
11 Jan 2010	Hostile fire	Captain	Read	Royal Logistics Corps: 11 EOD Regiment
31 Dec 2009	IED attack	Sapper	Watson	33 Engineer Regiment (OED): Royal Engineers
15 Nov 2009	IED attack	Corporal	Marlton-Thomas	33 Engineer Regiment: Royal Engineers
<b>31 Oct 2009</b>	<b>IED attack</b>	<b>Staff Serg.</b>	<b>Schmid</b>	<b>Royal Logistics Corps</b>
20 July 2009	IED attack	Captain	Shepherd	Royal Logistics Corps: 11 EOD Regiment
6 July 2009	NH helicopter crash	Captain	Babington-Browne	22 Engineer Regiment: Royal Engineers
10 Sept 2008	IED attack	Warrant Off.2	O'Donnell	Royal Logistics Corps: 11 EOD Regiment
9 Aug 2006	NH vehicle accident	Private	Reeves	Royal Logistics Corps

21 Sept 2012	Non-hostile	Sergeant	Kups	104 Force Support Battalion attached to 4 Close Support Battalion, REME
16 June 2011	IED attack	Craftsman	Found	Royal Electrical and Mechanical Engineers (REME)
25 Sept 2010	IED attack	Corporal	Thomas	Royal Electrical & Mechanical Engineers (Special Forces Support Group)
13 Aug 2010	Small arms fire	Sapper	Gurung	21 Engineer Regiment: 69 Gurkha Field Squadron
13 Aug 2010	Small arms fire	Sapper	Foster	21 Engineer Regiment
2 Sept 2009	IED attack	Lance Corporal	Brandon	Corps of Royal Electrical & Mechanical Engineers (REME)
4 Aug 2009	IED attack	Craftsman	Lombardi	Royal Electrical & Mechanical Engineers (REME)

23 May 2009	IED attack	Sapper	Rossi	38 Engineer Regiment: 5 Field Squadron
21 Dec 2008	IED attack	Corporal	Deering	Commando Logistics Regiment
12 Dec 2008	Suicide bomber	Marine	Davies	Commando Logistics Regiment
27 June 2008	NH vehicle accident	Warrant Off.2	Shirley	Royal Logistics Corps: 13 Air Assault Support Regiment
9 Nov 2007	NH vehicle accident	LanceCorporal	Alderton	36 Engineer Regiment: 20 Field Squadron
17 Sept 2007	IED attack	LanceCorporal	Violini	36 Engineer Regiment: 20 Field Squadron
6 Aug 2006	Small arms fire	Private	Cutts	Royal Logistics Corps: 13 Air Assault Support Regiment

\* EOD = Explosive Ordnance Disposal; NH = non-hostile

### 3.4 Suicide bombings and senior ranks.

*Suicide bombings:* In the first 160+80 weeks since 1 May 2006 to 28 November 2010, 33 suicide bombings have caused 63 military fatalities (out of 1,863 deaths in 240 weeks: **3.4%**). The mean has been **1.9 military fatalities per suicide bombing** in Afghanistan (15 single fatalities, 12 pairs, three triple fatalities, and single incidents of 4, 5, and 6 deaths).

Of these 63 military deaths in suicide bombings, there were four (1+3) in PERIOD 12b, none in PERIOD 12a, eight fatalities in PERIOD 11b (2+6), one death in PERIOD 11a, six fatalities (4 + 2) in PERIOD 10 and seven (1+2+1+3) in PERIOD 9. There were thus 26 military fatalities in 11 suicide bombing incidents in the 80 weeks of PERIODS 9+10+11+12, of whom 24 were US/UK/Canadian personnel (in 144,771 pys) – a clearly low US/UK/Canadian military fatality rate by suicide bomb of **17 per 100,000 pys**. Of the earlier 37 military fatalities in 22 suicide bombing incidents in the 160 weeks of PERIODS 1 to 8, 25 were US/UK/Canadian in 117,853 pys, a similarly low rate of **21 per 100,000 pys**.

Subsequently, suicide bombing has claimed five military fatalities in PERIOD 13, seven (2+5) in PERIOD 14 [one of them a German major], five US fatalities in PERIOD 15 [one of them a lieutenant colonel: suicide car bomb], and seven military fatalities in PERIOD 16 [4 French, one a brigadier + 3 US] **a total of 24 fatalities out of 804 military deaths in 80 weeks: 3.0%. In PERIOD 17, suicide bombing claimed nine/170 military lives [1 US in IED suicide attack, 3US sergeants in Khost, 2US sergeants in Logar, 2US majors and 1 US command sergeant major in Kunar].**

*Senior ranks:* In the first 160+80 weeks since 1 May 2006, there had been 17 military fatalities at the senior rank of Lieutenant Colonel or Colonel: nine in PERIODS 1 to 8 (8US + Italy), seven in PERIODS 9 to 12 (4US +US in helicopter crash + UK + Canadian + Georgian in IED attack which killed four Georgians in total). Twenty-two majors also died: 13 in PERIODS 1 to 8 (9US + UK + 2Canada + Denmark), and nine in PERIODS 9 to 12 (3US + UK + Canada + Germany; US in helicopter crash and UK in RPG attack; and US in NH helicopter crash that killed 9 US personnel in total). In total, 38 deaths (2%) with rank of major/ Lt Col/ Colonel (or equivalent) were among 1,865 military fatalities in PERIODS 1 to 12.

The reason that we first drew attention to these fatalities in PERIOD 11b was *data-inspired*: on 18 May 2010, a suicide car bombing in Kabul claimed six coalition military lives, four of them ranked Lieutenant Colonel/Colonel. This one incident claimed the lives of a US colonel, a Canadian colonel and two US Lieutenant Colonels as well as US Specialist and US Staff Sergeant. **Prior to this major incident in Kabul**, suicide bombings had caused the death of only one other person ranked Major/Lieutenant Colonel/Colonel – a US Lieutenant Colonel who died on 26 May 2009 (in PERIOD 9): that is one out of 30 **prior** fatalities ranked Major/Lieutenant Colonel/Colonel (3%) was by suicide bombing, no different from the all-ranks rate.

In PERIOD 13, heart attack caused the death of an US major, IED attack caused the death of UK major, and hostile fire the death of a Norwegian Lieutenant Colonel. In PERIOD 14a, US Lt Colonel (and a sergeant) died by small arms fire at the Afghan National Civil Order Police Compound in Helmand, a German major (and Hauptfeldwebel) died by suicide bomber, and a US Lt Colonel and four majors (together with two captains and master sergeant) died by treacherous small arms fire at Kabul International Airport. In PERIOD 14b, one of the 30 US fatalities when a Chinook helicopter was brought down was a Lieutenant Commander (major-equivalent). In PERIOD 15, US Lieutenant Colonel died (with four others:

2 sergeants, staff sergeants, and Canadian master corporal) in suicide car bomb, and UK Squadron Leader in an IED attack. In PERIOD 16, eight senior ranks died as follows: French brigadier, four Turkish majors, US major and US Lieutenant Colonel, and US Brigadier General (non-hostile) died.

PERIODS 1 to 12 & 13+14+15+16 have seen the deaths of 16 & eight = 24 military personnel ranked Lt Colonel/Colonel/Squadron Leader and of 22 & 13 = 35 majors among 1,863 & 804 = 2,667 military fatalities. Overall, about 1 in 45 military fatalities in Afghanistan ranked major or higher.

In PERIOD 17, five senior ranks died as follows among 170 military fatalities: US navy commander (non-hostile), US Lieutenant Colonel (Green-on-Blue on icasualties.org but **not** by our account of Camp Bastion attack/defence), 2US majors (with command sergeant major) by suicide bomber, and US major (non-hostile).

### ***3.5 Friendly fire***

In PERIOD 13, two fatalities (one Italian in Badghis, one UK in Helmand) were ascribed to 'friendly fire – small arms fire' and two US hostile-deaths to 'drone fire'. In PERIOD 14, one French fatality was ascribed to 'non-hostile friendly fire'. In PERIOD 15, a New Zealander died by hostile friendly-fire and a US soldier by hostile 'small arms fire-friendly fire'. PERIODS 13+14+15 accounted for 7 deaths by friendly fire, and nil in PERIOD 16+17.



**APPENDIX for REFERENCE on cross-checking of Green-on-Blue fatalities**

<i>Calendar year</i>	<i>Best estimate of Green-on-Blue fatalities</i>	<i>How discrepancies between icasualties.org &amp; the Long War Journal (LWJ) were aligned by us.</i>
2008	2	<i>US fatalities by saf on 16/18 October 2008 and 29 September 2008 are credibly G-on-B by LWJ's account but listed as saf only by icasualties.org</i>
2009	10	<i>Only the 5 UK safs were listed on icasualties.org as G-on-B. LWJ gives credible accounts of why US safs on 29 December (1), 2 October (2) and 27 March (2) should be counted as G-on-B; excluded are 2 US G-on-Bs in Wardak on 28 October because no similar deaths appear around that time/place on icasualties.org</i>
2010	11	<i>Included as 6 US safs on 29 November 2010 which icasualties.org did not list as G-on-B; likewise 2 US Marines on 4/6 November 2010; excluded are 2 Spanish safs by Afghan driver who was not necessarily ANP. Both lists agree on 3 UK saf G-on-B on 13 July 2010.</i>
2011	25	<i>Includes 2 US saf deaths in Pakita on 4 August 2011 which icasualties.org does not list as G-on-B; includes two US G-on-B fatalities that occurred Afghan National Civil Police compound on 13 May 2011 whereas icasualties.org lists a single G-on-B in a different location – this looks as if designation has been wrongly ascribed; includes 8 ISAF fatalities at NATO airbase on 27 April 2011 which icasualties.org does not list as G-on-B but clearly were; excludes 5 fatalities described on icasualties.org as suicide bomber/grenade but listed as G-on-B by LWJ; includes 2 US saf fatalities on 4 April 2011 which icasualties.org does not list as G-on-B; excludes as G-on-B 2 ISAF saf shootings by Afghan hired by Tundra Security Group on 19 March 2011 which LWJ includes; includes 1 Italian saf fatality on 18 January 2011 which icasualties.org does not list as G-on-B; includes 3 German safs which icasualties does not list as G-on-B; excludes B-on-G saf on 15 January 2012.</i>
2012 to 28 October	30 + 19 = 49	<i>Includes LWJ-listed US fatality on 19/18 August 2012 in Helmand; excludes LWJ fatality on 13 October 2012 which is listed by icasualties.org as due to IED (suicide attack). Includes LWJ US Marine fatality on 6 May 2012 which icasualties.org shows as saf but not G-on-B; includes second UK soldier {Lance Corporal Michael Foley} who died in G-on-B attack in Helmand on 26 March 2012; excluded is LWJ's account of fifth French fatality arising from G-on-B incident on 20 January 2012. Excluded are 2 US fatalities by saf during attack/defence at Camp Bastion which icasualties.org lists as G-on-B but uniforms donned were US, not Afghan and the attackers were not embedded.</i>

The following list, prior to PERIOD 17 and cross-reference to LWJ, was derived by Bird & Fairweather from press reports and, as such, may be incomplete.

Because incidents of apparent treachery were not readily identifiable as such on icasualties.org prior to PERIOD 17, we reviewed obituary and pres notices for all listed deaths by small arms fire.

In PERIOD 16, 12: two UK personnel were killed on 12 May 2012 (Afghan police); one US sergeant on 6 May 2012 (Afghan police uniform suspect) and another on 25 April 2012; UK lance-corporal and sergeant were killed on 26 March 2012 (rogue Afghan personnel suspected) and, in a different province but on the same day an US sergeant (alleged Afghan police). Three pairs of US personnel, each pair sergeant or higher-ranked soldier, were killed respectively by rogue Afghan soldier, security officer, soldier on 1 March 2012 (Kandahar: staff sergeant & private 1<sup>st</sup> class), 25 February 2012 (Kabul City Ministry of Interior: Lieutenant Colonel & major), and 23 February 2012 (Nangarhar: sergeant & corporal). The twelfth rogue Afghan incident caused the death of US lance-corporal on 1 February 2012. PERIOD 16 coincided with an American soldier having run amok and murdered Afghan civilians, including children; and offence at the inadvertent burning of Korans.

In PERIOD 15, 10: four French personnel were killed on 20 January 2012 by an Afghan soldier during a training exercise at a base jointly operated by French and Afghan forces in the eastern province of Kapisa. Several other soldiers were wounded, see<sup>41</sup> <http://www.voanews.com/english/news/europe/France-Suspends-Afghan-Military-Operations--137749718.html>}; also an US soldier was killed by an Afghan soldier on 8 January 2012. Two French Foreign Legion soldiers were killed by an Afghan soldier in eastern Afghanistan on 29 December 2011; and on 29 October 2011, an Afghan soldier killed three Australian army trainers in the south. All 10 deaths were registered as having been caused by small arms fire.

In PERIOD 14, 10: eight US military personnel were shot by an Afghan pilot at Kabul International Airport on 27 April 2011 and two US personnel were shot at the Afghan National Civil Order Police Compound in May 2011.

In PERIOD 13, 9: an Afghan police trainee killed six US soldiers in eastern Afghanistan on 29 November 2010 {See<sup>42</sup> <http://www.wsws.org/articles/2010/dec2010/afgh-d01.shtml>} and on 18 February 2011, a man in Afghan army uniform killed three German soldiers in northern Afghanistan.

In PERIOD 12, three British Royal Gurkha Rifles soldiers were killed by an Afghan soldier on 13 July 2010. In PERIOD 10, on 3 November 2009, five UK military personnel had been shot dead by a rogue Afghan policeman<sup>43</sup>.

**In summary, during the 80 weeks of PERIODS 13+14+15+16, apparent treachery cost the lives of at least 41 ISAF-personnel, and accounted for 5% of all fatalities (41/804); alternatively, for 41/152 (27%) deaths by small arms fire; and outnumbered friendly-fire deaths by more than 4: 1 (namely, 41: 7).**