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ACTION ON  
ARMED VIOLENCE

**AOAV**

# A TALE OF TWO CITIES

The use of explosive weapons in Basra and Fallujah, Iraq, 2003-4



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**With thanks to**

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**Cover Illustration**

A US Marine Corps M1A1 Abrams tank fires its main gun into a building in Fallujah during Operation Al Fajr/Phantom Fury, 10 December 2004, Lance Corporal James J. Vooris (UMSC)

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# FOREWORD

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*“ Sound military tactics employed in the pursuit of strategic objectives tend to restrict the use of explosive force in populated areas [... There are] ample examples from other international military operations that indicate that the excessive use of explosive force in populated areas can undermine both tactical and strategic objectives.”*

Bård Glad Pedersen, State Secretary, Ministry of Foreign Affairs of Norway, 17 June 2014<sup>1</sup>

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The language of conflict has changed enormously. Today engagements are often fought and justified through a public mandate to protect civilians. And yet the weapons used, and the way they are used, far too often pose a great danger to those civilians.

The use of explosive weapons in populated areas puts civilians at grave risk of death and injury, as AOA V has documented over several years.

How, then, the urgent question then must be asked, can explosive weapons be used by governments in a way that is consistent with a mandate to reduce harm to civilians?

How can state and international forces regulate the use of weapons that affect a wide area and so minimise their collateral damage?

What are the political, military, strategic and technological factors that shape the decision to fire?

And, ultimately, how can a government achieve peace without creating desolation?

In this series of reports, of which this is one, Action on Armed Violence (AOAV) explores recent and ongoing military practices in the use of explosive weapons. We looked at three separate contexts where explosive weapons have been deployed by foreign forces, in a territory where

*their government* is not the governing authority. Three case studies in three places most heavily-affected by explosive violence in recent years: Afghanistan, the Gaza Strip, and Iraq.

These reports build on research by AOA V that shows how the use of explosive weapons with wide-area effects in populated areas leads to a predictable pattern of excessive civilian harm. It considers what rules and policies already exist to regulate the use of such force. And it asks to what extent are civilians protected not only by international law, but also by the practices of states on the ground, many of which go beyond existing law? It concludes by asking, too, what measures could still be taken to reduce the terrible harm of explosive weapons on civilians?



# TIMELINE OF THE IRAQ WAR

**132,487**

MINIMUM NUMBER OF TOTAL  
CIVILIAN DEATHS IN IRAQ SINCE  
THE FIRST STRIKE IN 2003

**30**

AVERAGE NUMBER OF CIVILIAN  
DEATHS PER DAY (SINCE 2003)

20 MARCH 2003

Missiles strike the capital city of Baghdad, signalling the launch of US-led operations against Iraq.

21 MARCH-6 APRIL 2003 **UK-led operation in Basra**

7 APRIL 2003

US forces enter Baghdad.

14 DECEMBER 2003

Saddam Hussein is captured in his hometown, Tikrit.

31 MARCH 2004

Gunmen in the centre of Fallujah ambush, kill and publicly exhibit the bodies of four American contractors from Blackwater Security.

5 APRIL 2004

**US forces launch Operation Vigilant Resolve in Fallujah.**

7 NOVEMBER 2004

**US forces launch Operation Phantom Fury in Fallujah.**

5 JANUARY 2006

Suicide bombers kill at least 120 people in the cities of Karbala and Ramadi.

23 NOVEMBER 2006

Five car bombs and a mortar shell strike Sadr City, Baghdad, killing at least 144 people and wounding 206.

30 DECEMBER 2006

Saddam Hussein is executed in Iraq.

10 JANUARY 2007

President George W Bush announces that an increase of more than 20,000 US troops to be deployed to Iraq. The UN announces that 34,000 civilians were killed in Iraq in 2006.

30 APRIL 2009

British troops leave Basra. 179 British military personnel had been killed during the six-year conflict.

25 OCTOBER 2009

147 civilians are killed, and 700 more wounded, when two car bombs hit Baghdad.

31 AUGUST 2010

President Barack Obama declares an end to the American combat mission in Iraq.

18 DECEMBER 2011

US troops leave Iraq. 4,489 US military personnel had been killed.

1 JANUARY 2014

United Nations say at least 7,818 civilians and 1,050 members of the security forces were killed in violent attacks across Iraq in 2013.

## MAP OF IRAQ





# INTRODUCTION: IRAQ AND EXPLOSIVE WEAPONS

In the midst of international controversy and condemnation, on 20 March 2003 a coalition of allied armed forces launched a military intervention against the regime of Iraqi President Saddam Hussein. Forty-nine countries supported ‘Operation Iraqi Freedom’ (see Figure 1), led by US and UK forces.<sup>2</sup> The intervention triggered years of conflict. Widespread armed violence still scars the people and the landscape of modern-day Iraq. By the end of 2014, Iraq Body Count (IBC), which maintains the world’s largest public database of violent civilian deaths in the country, estimates that as many as 150,000 civilians have died violent deaths in Iraq since those dark March days of over a decade before.<sup>3</sup>

Today, Iraq stands out as the country most blighted by explosive violence. Action on Armed Violence (AOAV) has been tracking the impacts of explosive weapons around the world since 2011. These weapons, which include the likes of aircraft bombs, mortars, rockets and improvised explosive devices (IEDs), are responsible for thousands of civilian deaths and injuries every year. Between 2011 and 2013, AOAV documented more civilian casualties from explosive weapons in Iraq than in any other country. AOAV recorded 28,918 total casualties from explosive weapons in Iraq, of whom 25,224 (87%) were civilians.<sup>4</sup>

Perhaps this is not surprising, given the historical legacy of harm that conflict has brought upon this nation. From day one, as the infamous ‘shock

and awe’ campaign reduced the Iraqi capital city Baghdad to rubble and ruin, using explosive weapons even in densely-populated areas was central to the strategies of coalition forces.<sup>5</sup> In part this was to avoid military casualties amid intense public scrutiny. *“The American way of war substitutes manpower for firepower,”* said retired Army general Bob Scales during the early days of the unfolding conflict. *“We expose as few troops as possible to close contact with the enemy. We do that by killing as many enemy as we can with precision weapons.”*<sup>6</sup>

How precise these weapons actually are is a subject of much debate, but explosive weapons are a tool that is all-too-often used to fulfil such rhetorical and strategic ends. The reason for this is clear: they can be deployed at a significant distance from the source of threat; and dropping bombs from fighter jets or launching shells from long-range artillery affords a degree of security to the perpetrators.

Their distancing effect however, is one central reason why the use of explosive weapons in populated areas raises enormous concerns for the protection of the civilians who are caught in the maelstrom of violence. These are weapons defined by their inherent capacity to affect a wide area with blast and fragmentation effects. Any use of explosive weapons in populated areas puts civilians at grave risk of unintended death and injury, as well as causing often-catastrophic damage to civilian buildings and infrastructure.

## Figure 1: Operation Iraqi Freedom (21 March – 30 April 2003)

- Five national military forces operated inside Iraq (US, UK, Australia, Canada, Poland)
- **466,985** personnel deployed (9% were non-US)
- 1,801 aircraft flew **41,404** sorties
- **29,199** bombs dropped (60% were guided munitions, 32% unguided).<sup>7</sup>

The protection of Iraqi civilians was repeatedly cited as a motive both for the 2003 intervention itself, and as a key priority throughout the later years of fighting.<sup>8</sup> The implicit objective of securing the protection of civilians in Iraq imposed a heightened burden to ensure this goal was not harmed by the means used to achieve it.

Unlike the wars in Afghanistan or the Balkans, the Iraq war was waged not by a formalised alliance (i.e. NATO), but by a coalition of national militaries. All forces involved in the initial months of fighting were under the ultimate direction and leadership of US Central Command (CENTCOM). However, different armies observed differing rules of engagement. While sharing the implicit objective of seeking to enhance civilian protection in Iraq they faced differing contexts and challenges, and were guided by differing approaches and policies.

### Methods and scope

In this report, AOV looks at the military practices and rules of engagement in place in two cities: Basra and Fallujah. The two periods analysed here are the **'Battle of Basra,'** when UK forces led an operation in the southern city of Basra between 21 March to 6 April 2003 (with military support of US and Australian forces), and the two operations undertaken by US forces in Fallujah in 2004: **Operation Vigilant Resolve** (5-28 April 2004), and **Operation Al-Fajr/Phantom Fury** (7 November 2004 to 23 December 2004).

Comparing operations in Basra and Fallujah allows for a consideration of how national military practices can affect the ways in which explosive weapons are used in populated areas. It also demonstrates how these approaches impacted the civilian communities in these two cities.

While direct comparisons between these two cities are inevitably limited by context, broad contrasts can be drawn and valuable questions raised by examining the rules of engagement that governed the use of explosive weapons in populated areas during the Iraq War.

What were the approaches and attitudes at the time of these two militaries, among the best funded, trained and most technologically



Refugees flee Basra, March 2003.

advanced in the world? How were the decisions to deploy explosive weapons in populated areas shaped by their respective military practices?

It is not the objective of this research to apportion blame on individuals, or to comment on the legality of either specific actions or the operation as a whole. Rather AOV seeks to compare military practices and procedures during a major recent conflict, and to identify any military practices that may have reduced the risk of civilian casualties.

Research for this study was carried out through publicly-available open-source material, including an analysis of the Iraq War Logs, previously secret US military files released by WikiLeaks, as well as transcripts of interviews of high-ranking British military personnel from the Chilcot Inquiry, an inquiry into the UK's involvement in the Iraq War.

There are limitations implicit in relying solely on open-source material. Documents relating to the military, such as the British rules of engagement, are often inaccessible to the public, and there were reports, particularly during the assaults on Fallujah, of media access being severely limited.

The focus of this report is on explosive weapons and their implications for civilians. Many other weapons were used by all parties to the fighting in Iraq, ranging from firearms, to white phosphorous.<sup>9</sup> While these raise many other important civilian protection questions, they fall outside AOV's focus and are not addressed in this report.

# INTERNATIONAL HUMANITARIAN LAW AND RULES OF ENGAGEMENT

The conduct of hostilities in contemporary armed conflicts is governed by the rules of international humanitarian law (IHL). This body of law seeks, for humanitarian reasons, to limit the effects of armed conflict, to protect those not taking a direct part in hostilities, and to minimise suffering and destruction during wartime.<sup>10</sup>

In addition to the fundamental prohibition on any direct attacks against civilians or civilian objects, the central tenets of IHL include rules on **pre-caution** (measures must be taken ahead of any attack to avoid and minimise harm to civilians), **distinction** (efforts necessary to distinguish at all times between combatants and civilians, as well as military and civilian objects), and **proportionality** (that no attack can be excessive in the harm caused to civilians in relation to the concrete and direct military advantage anticipated).<sup>11</sup>

Crucially IHL provides only limited protection against the pattern of harm caused by the use of explosive weapons in populated areas.<sup>12</sup> It does, however, represent the building blocks upon which rules of engagements (RoE) for all militaries are theoretically based.

## Rules of War

RoE are military directives that describe the circumstances under which ground, naval and air



Iraqi refugees cower as they try to flee Basra, 2003.

forces can enter combat. They stem from multiple field manuals, doctrines and training publications, not all of which are in the public domain. Even a decade after the Iraq war began most of the rules in place at the time for both US and UK forces are still in force today, and, in the UK in particular, a lot of information specific to the questions asked by this research is restricted from public scrutiny.<sup>13</sup>

These rules are not restricted solely to the deployment of explosive weapons, but provide insight into principles governing all lethal use of force. Both the UK and US publicly emphasised how the RoE for Iraq were informed and underpinned by the principles of IHL.<sup>14</sup>

## ROE and collateral damage

The 2000 Standing Rules of Engagement for US Forces (CJCSI 3121.01A) state, for example, that the use of force is limited by international law, as well as setting out additional limitations such as US domestic law and policy.<sup>15</sup> IHL represents only the minimum requirements for states, and the rules of many militaries are thought to be far more restrictive than these general parameters.

RoE are concerned with the balance between protecting both forces and civilians whilst still achieving a military objective. UK soldiers serving in Iraq, for instance, were issued with ‘Card Alpha,’ which stated the narrow parameters in which lethal force, including with explosive weapons, would be permitted. Card Alpha stated that “[...] in all situations you are to use no more force than absolutely necessary.” Troops should “only open fire against a person if he/she is committing or about to commit an act likely to endanger life and there is no other way to prevent the danger.”<sup>16</sup>

Despite the limitations on publicly-available information it is clear that both US and UK forces explicitly prioritised the protection of civilians from incidental harm; so-called ‘collateral damage’.



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“Under British military rules of war, British troops would never be given clearance to carry out attacks similar to those being conducted by the US [...] British rules of engagement only allow troops to open fire when attacked, using the minimum force necessary and only at identified targets. The American approach was markedly different. When US troops are attacked with mortars in Baghdad, they use mortar-locating radar to find the firing point and then attack the general area with artillery, even though the area they are attacking may be in the middle of a densely populated residential area.”

Senior British commander, talking to Jonathan Holmes.<sup>17</sup>

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Collateral damage essentially means causing unintended or incidental deaths and injuries to civilians, or destroying civilian objects. The ‘US Rules of Engagement of Iraq’, a document obtained through Wikileaks, highlights how *“Military operations will be conducted, in so far as possible, to ensure that incidental injury to civilians and collateral damage to civilian objects are minimized.”*<sup>18</sup>

Efforts to limit civilian casualties in the course of fighting may necessitate restrictions on the occasions in which force can be used, as well as on the means and methods of such force. In Fallujah, US Lt. Gen. Richard Natonski said: *“There were many times that my regiments had targets that they wanted to engage, but because of the rules of engagement and the amount of collateral damage, we were precluded from hitting certain sites in the city.”*<sup>19</sup>

However, the operations carried out in Fallujah by American troops in 2004 resulted in significant civilian casualties and civilian infrastructure damage when compared to the British-led operation conducted in Basra in 2003. Despite a clear awareness of the need to avoid collateral damage and to minimise harm to civilians, over a thousand civilians died in the two assaults on Fallujah.<sup>20</sup>

*“There was never a cavalier attitude toward civilian harm, early in both the wars in Afghanistan and Iraq,”* as Neta C. Crawford, Professor of Political



© Cpl. Matthew J. Apprendi

Marines in action in Fallujah, 7 April 2004.

Science at Boston University, highlights. *“[Y]et the US military and political leadership seemed to tolerate greater collateral damage when military necessity was believed to demand it.”*<sup>21</sup>

A more flexible, fluid definition of what constitutes military ‘necessity’, or what is meant by ‘excessive’ collateral damage allows for considerable interpretative variance among commanders on the ground. The more permissive the RoE are, the more they heighten the margin for error in the heat of battle, and the more likely it is that civilians fall victim to explosive weapon use.

# BASRA, 2003

The southern city of Basra is one of the largest in Iraq. Predominantly Shia, in March 2003, Basra’s population was estimated to be between 1-1.5 million.<sup>22</sup>

Basra was heavily shelled during the Iran-Iraq war of 1980-1988. For many years after the conflict ended the city suffered from its effects, with intermittent electricity and poor sanitation.<sup>23</sup> Basra was again bombed in 1991 after a failed uprising against Saddam Hussein’s regime.<sup>24</sup>

Before entering Iraq in 2003, UK planning noted that while there was an existing level of popular opposition to Saddam Hussein’s regime, any potential support for the coalition was contingent on avoiding civilian casualties. While UK forces were expected to meet with relatively-limited opposition, *“We have no specific intelligence on the instinctive reaction of Basra’s civil populace to UK presence. Much will depend upon the*

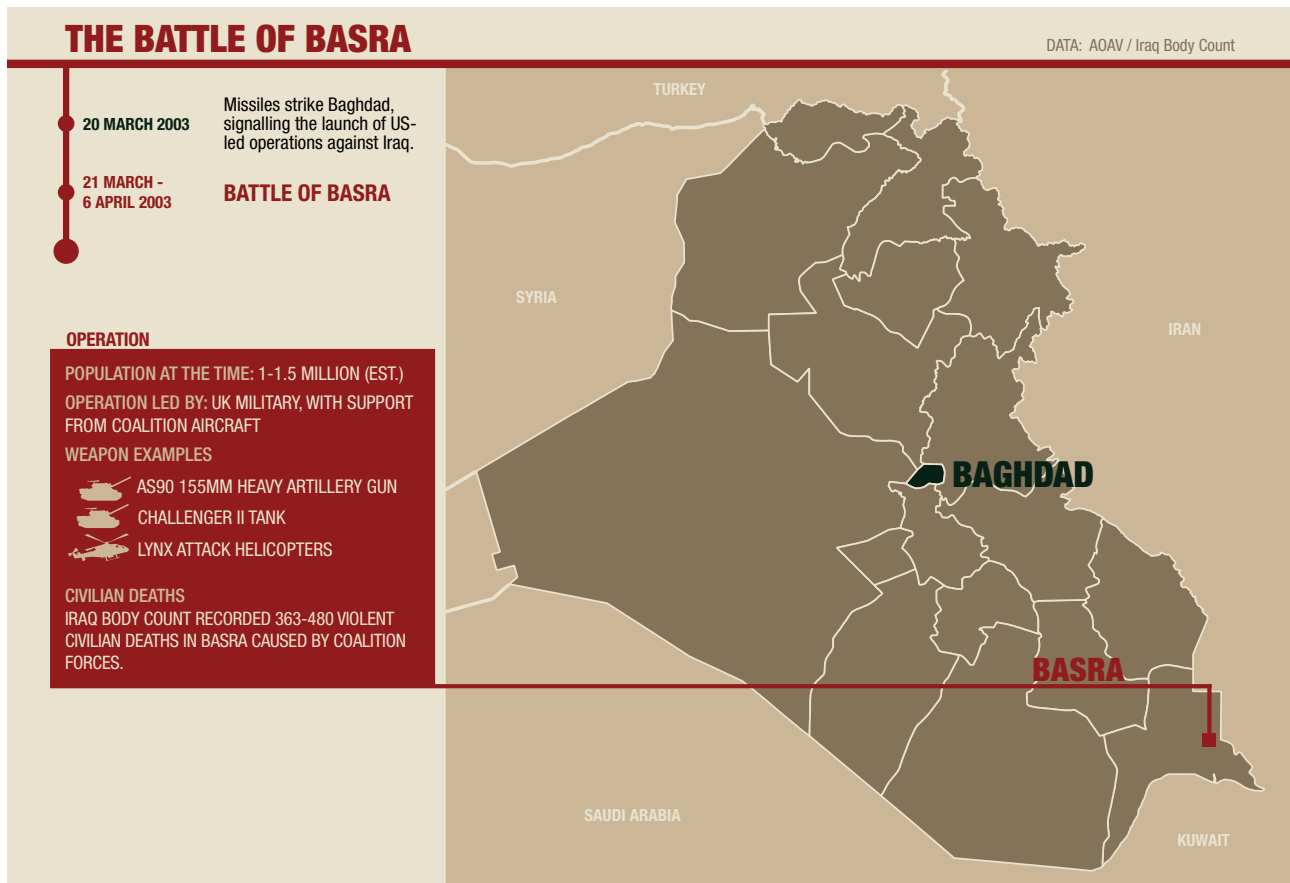
*circumstances in which control is established (e.g. destruction of civil infrastructure and civil casualties) and how Basra is subsequently administered.”*<sup>25</sup>

The Battle for Basra began on 21 March 2003, and ended on 6 April 2003 when UK troops entered the city centre.

## RATTLING THE CAGE

All coalition forces participating in the intervention were led by US Central Command (CENTCOM), with UK forces given the task of securing Basra.<sup>26</sup>

Several British regiments were involved in the fighting for Basra, including the British 7th Armoured Brigade (also known as the Desert Rats), the Black Watch and 1st Battalion, the Royal Regiment of Fusiliers.<sup>27</sup> Other regiments and units that pushed into Basra included the Royal Scots Dragoon Guards and the Royal



Marine Commandos.<sup>28</sup> US air support was prominent in the fighting and United States Marines tanks led the tank battles outside Basra.

“*What we did today was rattle the cage. We went in, pushed further, trying to create a response to draw the enemy towards us so we could fight more on our own terms.*”

UK soldier, speaking to British journalist Janine di Giovanni, Basra, April 2003.<sup>29</sup>

By 23 March, after just three days of tank battles in open areas outside the city itself, Basra was surrounded and its outskirts secured.<sup>30</sup> For almost three weeks UK forces waited outside Basra, finally taking the city on 6 April 2003.

### Loose-cordons

UK forces placed a loosely-formed cordon around Basra, allowing civilians to flee the city or to leave in order to bring back food.<sup>31</sup> As the UK military ringed the city, residents of Basra began to flee, fearing the increasingly-desperate tactics of Iraqi militia forces, and the threat of future bombing of civilian areas from where Iraqi tanks were based. “*All the [Iraq loyalist] artillery and tanks are near our houses,*” said retired engineer Mohammed on escaping the city. “*And they are firing from there.*”<sup>32</sup>

The importance of restraint echoed throughout the planning and conduct of the Basra operation. Limits on RoE among UK forces meant that soldiers were “*desperate to be allowed to take on Saddam’s forces without the tight restrictions imposed on them.*”<sup>33</sup>

British commanders avoided entering the city itself to engage Iraqi forces within populated areas of Basra, where “*the British armor [sic.] would be nullified.*”<sup>34</sup> The choice to remain outside the city may have saved both civilian and military personnel lives in the long run. Explosive weapons were used during this stand-off period, with the

Royal Artillery using a Phoenix surveillance drone to direct artillery and air strikes against military targets primarily removed from the populated heartland of Basra.<sup>35</sup>

### Tight controls

The UK military tightly controlled the process of using heavy explosive weapons. Only one regiment, the 3rd Regiment Royal Horse Artillery, could use 155mm artillery in the battle for Basra, and each single firing mission could only be authorised by the regiment commander. This level of control was higher than had been the norm in UK artillery doctrine. While UK forces fired 9,153 155mm artillery rounds during the battle, the city itself was treated as a “restricted fire area” by the commander in question.<sup>36</sup> The UK approach to the Basra operation was “*conditioned by the need to avoid large UK or civilian casualties, and progress will be determined by effects and events, rather than a set timetable.*”<sup>37</sup>

The British were to remain outside the city, as one British official described it at the time: “*The forces in Basra are being engaged. We’re not*

### Artillery

The UK in Basra deployed the **AS90 heavy artillery gun**, which fires heavy 155mm shells, still among the largest common artillery shells in modern use. The AS90 can fire a burst of three rounds in less than ten seconds, and a sustained rate of two rounds a minute.<sup>38</sup> Each AS90 holds 48 shells, which it can fire over distances of 25km.<sup>39</sup>

The UK also used the **L118 105mm Light Gun**, which although smaller than the AS90, has a faster rate of fire, and so can launch more explosive shells at a target in a shorter space of time (twelve rounds in a minute).<sup>40</sup> The long range and relatively wide dispersion of even the most sophisticated artillery systems means that their use in populated areas is likely to result in unwanted ‘collateral damage’ as shells fall short or wide of their target, landing among homes or businesses.

going in. We wait for them to come to us. Where we get targets of opportunity, we take it. It's a waiting game."<sup>41</sup>

*“ We are finding collateral damage difficult. We get clearance to fire, a computer tells us where we are firing in relation to schools and houses, but the decision is taken on proportionality and military necessity.”*

Major Ian Bell, commander of Royal Horse Artillery batteries outside Basra<sup>42</sup>

## Tank battles

As the stand-off progressed, the remaining Iraqi troops inside the city lost patience and tried to provoke UK troops by launching sorties out of the city with tanks and armed vehicles as well as mortaring positions.<sup>43</sup>

On 27 March 2003, Iraqi Soviet-made T-55 tanks and armoured personnel carriers streamed out of the city of Basra, heading towards British forces on the Al Faw peninsula.<sup>44</sup> From the ground, the convoy was reportedly pounded by 155mm AS90

### Tanks

The UK deployed **Challenger 2** and the US mostly used the **M1A1 and M1A2 Abrams** tanks in Iraq. These tanks are equipped with a powerful main gun that fires a range of 120mm shells.<sup>45</sup> These include High-Explosive Squash Head (HESH) rounds, which squash a ‘plaster’ of explosive across a building or target on impact. The widened surface area and the direct contact means that when the explosive in the shell detonates a fraction of a second later, it projects a violent blast wave that can cause substantial damage. The Challenger 2 can fire up to eight of these rounds a minute and shoots at speeds of up to 25 mph.

heavy artillery and 105mm light field guns.<sup>46</sup> The Iraqi tanks dispersed, and became vulnerable in the open countryside, which had turned into a muddy quagmire after torrential rain.<sup>47</sup>

UK Challenger tanks were deployed to fire their shells in order to destroy 14 Iraqi tanks that had moved out into a wooded open area, away from the population of Basra.<sup>48</sup> The engagement on 27 March was described as the largest tank battle involving British forces since the Second World War.<sup>49</sup>

UK troops and tanks only entered Basra city itself on 6 April, after spending nearly three weeks on the outskirts of the city. By drawing Iraqi forces out from the city, rather than taking the fight to the opposition inside populated areas, the risk to civilians inside the city was diminished.

*“ [g]iven the heavily populated nature of Basra, and the number of restricted and no fire areas imposed from higher headquarters, I treated the whole of Basra as a restricted fire area.”*

Major General Nicholas Ashmore, commander of 3rd Regiment Royal Horse Artillery, 2001-2004<sup>50</sup>

It would, however, be an over-simplification to imply that UK forces did not shell populated areas. Undoubtedly, UK forces ordered the deployment of explosive weapons in populated areas; but it is also clear that forces were largely kept from more intense escalations in engagements in Basra.

While there were civilian casualties in the city during this time, the strong suggestion from soldiers and observers alike is that the impact on civilians would have been far greater if the military response of UK forces had been more aggressive. Similarly while there was damage to infrastructure through British shelling and aerial bombing, it was not as widespread or as severe as that documented in Fallujah, as this report will go on to describe.



Crucially, the UK example of practice in Basra illustrates that protecting one's own troops and protecting the lives of civilians are not incompatible goals. It is possible to achieve both through a measure of restraint in the use of force.

## AIR STRIKES: MUNITION SELECTION

Coalition air strikes in support of UK ground troops in Iraq are also worth examining. In the first month of the conflict 29,199 munitions were dropped in Iraq. Of these, 19,948 were guided munitions (68%).<sup>51</sup> In comparison, in the Gulf conflict in 1991, just eight per cent of all bombs dropped were precision-guided munitions.<sup>52</sup>

The most commonly dropped bomb during the opening month of conflict (20 March – 30 April 2003) in Iraq was the GBU-12 Paveway II (7,114 bombs, 24% of all aerial munitions deployed).<sup>53</sup>

The GBU-12 weighs 225kg/500lb, of which 89kg is high-explosive.<sup>54</sup> It is based on the general-purpose Mk-82, but comes with a laser guidance system. The Mk-82 is the classic 'dumb' bomb. It was the second most-commonly dropped bomb in this period in Iraq (5,504 bombs, 19% of the total).<sup>55</sup>

The majority of air attacks in Basra were carried out by US fighter jets. In one strike overnight on 29 March, two US F-15E Strike Eagles, using laser-guided munitions, destroyed a building where 200 suspected paramilitary members were meeting.<sup>56</sup> Reports indicated that US aircraft had used a delayed fuse bomb that first penetrated the building and then detonated within. This was selected in an effort to minimise the wider blast effect.<sup>57</sup>

A 2003 report by Human Rights Watch found that both US and UK forces took significant steps to protect civilians from their air strikes. *"The United States and United Kingdom recognized that employment of precision-guided munitions alone was not enough to provide civilians with adequate protection. They employed other methods to help minimize civilian casualties, such as bombing at night when civilians were less likely to be on the streets, using penetrator munitions and delayed fuzes to ensure that most blast and fragmentation damage was kept within the impact area, and using attack angles that took into account the locations of civilian facilities such as schools and hospitals."*<sup>58</sup>



Iraqi civilians escorted through the ruins of Basra by soldiers from the 1st Irish Guards.



Yet not all strikes were as carefully planned and engaged as better practice would recommend.

On 5 April 2003, a US aircraft bombed a building in Basra in an attempt to kill Lieutenant General Ali Hassan al-Majid, otherwise known as ‘Chemical Ali’. In the attack, 17 people living on either side of the building were killed. All 17 were members of two families. Both families denied any Iraqi leadership presence, and had not seen al-Majid.<sup>59</sup>

It is thought that the munition used in the attack was a 500-pound laser-guided bomb.<sup>60</sup> Abid Hamudi, a 70-year-old retired oil industry worker, who lost ten members of his family in the blast, told *The Washington Post*: “*Ten lives are gone. The house was completely destroyed. You came to save us, to protect us. That’s what you said. It’s now the contrary. Innocent people are killed.*”<sup>61</sup>

Human Rights Watch concluded: “*The collateral damage estimate done on the targets appears to have allowed for a high level of civilian damage. This attack may have been approved due to the perceived military value of al-Majid. Had smaller weapons been used, however, many civilian lives would have been spared.*”<sup>62</sup>

### Wide area effects

The increase in the use of precision-guided munitions may have helped to reduce the margin for error in one part of a weapon delivery system, but it does not eradicate the fundamental source of threat to civilians. When used in populated areas these weapons still retain the capacity to cause significant civilian harm. Heavy aircraft bombs with a large blast yield will affect a wide-area regardless of how accurately they are delivered. Moreover, technology is only as effective as the rules that govern their use and the information that guides it. When used in populated areas, even the most advanced guidance technology does not entirely remove the potential for terrible harm to civilians.

Overall AOA’s analysis of Iraq Body Count’s data has shown that a minimum of 448–593 civilians were killed in Basra between 20 March and 9 April 2003 by coalition forces. At least another thousand were injured.<sup>63</sup> Not all of these deaths were caused by explosive weapons, and many of these

deaths are attributed not to UK ground actions but to aerial bombing. During the first three days of fighting around Basra, the International Committee of the Red Cross (ICRC) reported that hospitals received around 100 war-wounded a day.<sup>64</sup>

Six years after the fighting in Basra, the UK paid more than £9 million in compensation to Iraqi civilians who had been injured, lost loved ones or had property damaged between 2003 and 2009 due to UK military operations in Iraq.<sup>65</sup>

### Cluster bombs

Both US and UK forces used cluster munitions during the early phases of the Iraq conflict, launched from air and the ground. Cluster munitions contain smaller explosive submunitions which are designed to cover a large area. Indiscriminate in nature, these weapons were banned by the international community in 2008.<sup>66</sup>

UK forces used cluster munitions in and around Basra, decisions that were condemned as “*poor weapons choices.*”<sup>67</sup> In one neighbourhood, artillery targeted Iraqi tanks hidden in a date grove in the middle of civilian homes and launched cluster munitions. According to Human Rights Watch investigators, these munitions blanketed a much larger area, injuring nine members of one family.<sup>68</sup> It emerged that the Royal Artillery fired more than 2,000 ground-launched cluster bombs around Basra, and at least 66 BL755 bombs were dropped from UK planes.<sup>69</sup>

The UK has since signed and ratified the Convention on Cluster Munitions, and in April 2014 finally completed the destruction of its entire stockpile of more than 190,000 cluster munitions and over 38 million submunitions.<sup>70</sup>

The US, however, has not yet signed up to the treaty at the time of publication.<sup>71</sup>

US 120mm mortar cannon fires illumination flares over Mosul, Iraq, June 2006.



# FALLUJAH, 2004

Fallujah is a city in the Iraqi province of al-Anbar, forty miles west of Baghdad. US planning before the operation began noted that most of Fallujah’s 50,000 buildings were residential, and densely-packed. The city’s layout was random, with no distinction between residential homes, businesses and industry, while the Jolan district in the north-east of the city was formed of “*twisting alleyways and a tangle of streets.*”<sup>72</sup>

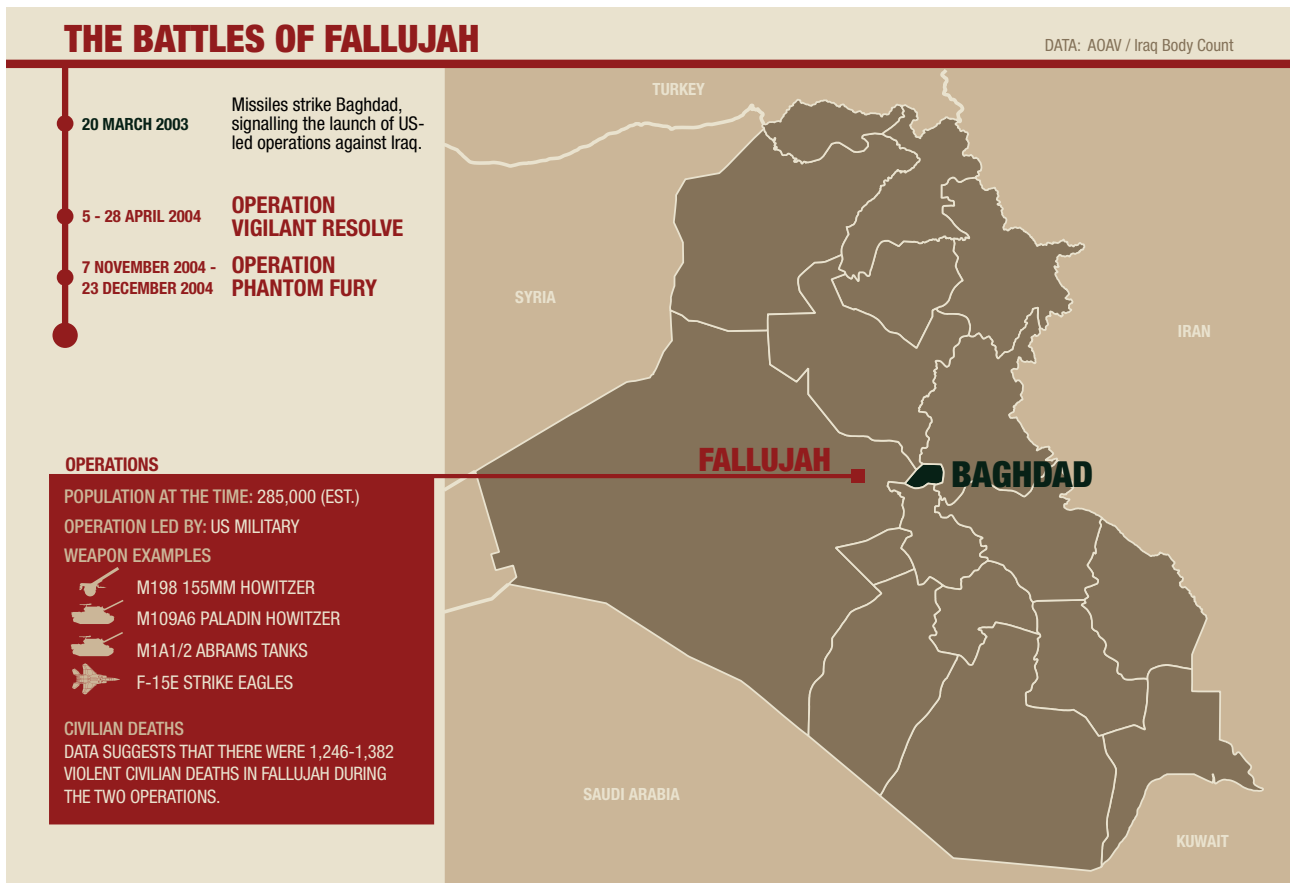
In 2003 Fallujah had been described as the “*most hostile place in Iraq,*” where “*grenade attacks and drive-by shootings were a daily occurrence.*”<sup>73</sup> Fallujah became the site of rapidly-escalating tensions between the US and opposition forces. In April 2003 US troops opened fire on Iraqi protesters during an anti-American rally, killing fifteen in an incident that furthered widespread hostility.<sup>74</sup> In November 2003, five months before the first operation in Fallujah, a US Chinook helicopter was brought down by an anti-aircraft missile outside

the city, killing 16 soldiers on-board.<sup>75</sup> The political set-up in Fallujah was far more hostile to foreign troops than the conditions faced by UK forces in Basra.

The US led two separate operations in Fallujah, the first in **April 2004 (Operation Vigilant Resolve)**, and the second during **November and December 2004 (Operation Al-Fajr/Phantom Fury)**. The two operations are considered together in this report.

## FIREPOWER FOR MANPOWER

On 31st March 2004, gunmen in the centre of Fallujah ambushed four American contractors working with the private-firm Blackwater Security. The images of their burnt and mutilated bodies were beamed across the world. The uproar that followed placed a huge amount of public and political pressure on the US military to respond. Unlike in Basra, there was a fervent sense of



urgency for the need to take Fallujah and to root out those responsible for the murders of the contractors.<sup>76</sup>

“Everything to the west is weapons-free [...] We’re going to let loose the dogs of war. It will be hell.”

Staff Sgt. Sam Mortimer, Fallujah, November 2004<sup>77</sup>

The US launched ‘Operation Vigilant Resolve’ on 5 April 2004. In contrast to UK actions in Basra, a far more restrictive cordon was set up around the city. All roads into Fallujah were closed, with a strict curfew imposed from 7pm to 6am. Women, children and elderly men were not allowed to leave the city until 9 April 2004, by which time there had already been heavy fighting in the city, including the bombing of a mosque compound in the city centre on 7 April.<sup>78</sup>

The need to minimise collateral damage was clearly indicated throughout the planning of operations. The protection of civilians is stressed throughout, for example, the 1st Marine Division Rules of Engagement (RoE) carried by US forces in Fallujah.<sup>79</sup> Yet from its earliest stages the US engagement in Fallujah showed a clear presumption towards the deployment of heavy explosive weapons in what were densely-populated areas.

Two battalion task forces with about 2,000 soldiers in total led the first assault into Fallujah on 5 April. They were backed by ten M1A1 tanks and a battery of powerful M198 howitzers.<sup>80</sup> Marine regiments attacked from the northwest and southeast.<sup>81</sup> Supported by jet fighters and attack helicopters, US forces engaged in intense urban street fighting for several weeks until 28 April 2004, when the city was given over to Iraqi forces.<sup>82</sup>

‘Operation Phantom Fury’ in November 2004 made even greater use of heavy explosive weapons in populated areas of the city. Efforts to restore security to Fallujah through Iraqi troops after the first operation ended in April failed in

part because the US chain of command felt that the connection with the local community prevented the ‘Fallujah Brigade’ from being aggressive enough in their use of force.<sup>83</sup> Before the US launched a ground offensive to retake the city, Fallujah was “pummelled for hours” by airstrikes targeting suspected safe houses and strongholds.<sup>84</sup>

On 7 November 2004, an estimated 10,000–15,000 US troops launched a ground assault on the city.<sup>85</sup> Pre-planned targets were pounded by artillery and air strikes, where “death and destruction rained down on the city from AC-130s [ground-attack aircraft] to any kind of fast-moving aircraft, 155mm howitzers, you name it – everything was getting in on the bombardment”.<sup>86</sup> It was thought that most of the 300,000 citizens of Fallujah had fled before Operation Phantom Fury (otherwise known as Operation Al-Fajr) began, but there were no official figures on this and thus attacking forces could not have known how many civilians remained in the city.<sup>87</sup> Estimates at the time suggest that even if 70–90 percent of the population had managed to flee, a minimum of 25,000 civilians remained caught among the falling bombs.<sup>88</sup> The US again placed a cordon around the city. Unlike in Operation Vigilant Resolve, they encouraged civilians, except for military-age men 16 to 55, to leave the city.<sup>89</sup>

The US 2004 Field Manual on Counterinsurgency Operations states that, “The American way of war has been to substitute firepower for manpower. As a result, US forces have frequently resorted to firepower in the form of artillery or air any time they make contact.”<sup>90</sup>

### Free fire

Indirect-fire weapons like artillery and mortars can be launched without a clear line of sight to a target, i.e. over buildings. The US deployed two different 155mm artillery pieces during the Fallujah operations, the M198 and the M109A6 Paladins. The powerful Paladins can fire shells over 13 miles: “The shells typically strike within about five yards of their target and are likely to kill anyone within 55 yards of the point of impact.”<sup>91</sup> Using such potent weaponry in a populated area puts civilians at great risk. Its use on a significant scale in Fallujah by





© United States Marine Corps

US M-198 155mm howitzer fires into Fallujah during Operation Phantom Fury.

US forces was heavily criticised even by its allies. Brigadier Nigel Aylwin-Foster, a British commander serving with American forces described how “*on one night over 40 155mm artillery rounds were fired into a small sector of the city.*”<sup>92</sup> Brig. Aylwin-Foster described how large sections of the city were treated as a free-fire zone in an attempt to reduce casualties among US troops. British officers at the time were reportedly “*appalled by the lack of concern for civilian casualties*” shown in the operation conduct, and that notably “*the US commander who ordered this devastating use of firepower did not consider it significant enough to mention it in his daily report to the US general in command.*”<sup>93</sup>

That it was not thought necessary to report the scale of artillery deployed in the operation reflects an attitude that did hold dear the stated intention of mitigating civilian casualties. It was this gung-ho approach that resulted in the destruction and damage of half of Fallujah’s buildings over the course of two short operations.<sup>94</sup> Reporter Kevin Sites, embedded with US forces in Fallujah during the second operation, described how Marines were allowed to operate with ‘liberal’ rules of engagement. “*Nuisances*”, Sites relayed, were “*met with*

*overwhelming firepower.*”<sup>95</sup> The relaxed RoE described by Sites reflected the need to preclude military casualties among US forces. They gave far greater leeway to US commanders on the ground to deploy explosive weapons than had been seen earlier through the UK approach to Basra.

US forces made extensive use of heavy explosive weapons with wide-area effects in and among civilian homes and residential areas in Fallujah. Between 7 November and 23 December, Fallujah was battered by 14,000 artillery and mortar shells, and 2,500 tank main gun rounds. At least 540 air strikes struck targets in and around the city.<sup>96</sup> The vast quantity of ordnance launched into the city resulted in a considerable risk from explosive remnants of war (ERW), which continued to threaten the lives of civilian residents after the operations ended.

When compared with the UK approach in Basra, the ready and widespread deployment of heavy explosive weapons in Fallujah can be seen to be a deeply concerning practice, not only because of the inherent and heightened threat that it posed to civilians and civilian objects, but also from a strategic perspective. The heavy-handedness in



“My view and the view of the British chain of command is that the Americans’ use of violence is not proportionate and is over-responsive to the threat they are facing. The US will have to abandon the sledgehammer-to-crack-a-nut approach.”

UK officer, speaking to The Telegraph newspaper<sup>97</sup>

military practice in Fallujah arguably played a great role in heightening hostility and grievance among the opposition, as well as severely damaging public perception around the world.

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## COUNTING THE COST

Air strikes took a heavy toll on the city of Fallujah. US jets dropped a wide variety of munitions ranging from Hellfire missiles to massive aircraft bombs. Approximately 150 air strikes during the first operations completely destroyed more than 75 buildings in the city, including two mosques.<sup>99</sup> At least 318 precision bombs, 391 rockets and missiles, and 93,000 machine gun or cannon rounds were fired in the second assault on Fallujah alone.<sup>100</sup>

Journalist Tara Sutton collected testimonies from witnesses to the bombing of Fallujah during the first assault, claiming that air strikes often seemed imprecise and inaccurate.

One resident of the densely populated Jolan district described what happened to his neighbours: “We came running. He was lying here, blown to bits. We even took pieces from the ceiling, and we left them here. They all died except one child.” One resident described how he was sitting at home with his wife and four children when a missile flew through their door at 9pm: “We were sitting in this room. I was hit by shrapnel. My 18-month old son was hit on the head.” His young daughter was killed.<sup>101</sup>

## Thermobarics

On 9 November 2004, thousands of US troops began a ground offensive in Fallujah, moving from residential home to residential home. This process of house clearance was characterised by the regular use of fragmentation grenades.<sup>102</sup> US forces also deployed “disposable one-shot rockets called thermobarics – new explosives that drove up the overpressure in confined spaces, creating tremendous destruction.”<sup>103</sup> In a Marines field report from April 2003, the thermobaric round was assessed, where “one unit disintegrated a large one-story masonry type building with one round from 100 meters.”<sup>104</sup>

Thermobarics, also called ‘vacuum bombs’, use a small charge to generate a cloud of explosive mixed with air, which is detonated by the explosives reacting with the air. This creates a vacuum, which sucks up any remaining oxygen, collapsing lungs and buildings alike. “This significantly increases the firepower that can be put in a single person’s hands,” said Reuben Brigety of Human Rights Watch. “I’m not aware of any other conventional munitions used by a single person that can have the same destructive power.”<sup>105</sup> They significantly magnify a typical blast effect and can affect a very wide area. Even in a light weapon a thermobaric munition has a massive potential for destruction. It is entirely inappropriate for use in populated areas.



US Marines patrol Fallujah during Operation Al Fajr, Phantom Fury.

© Lance Cpl. James J. Vooris

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*“ Behind us there’s a market... that’s where the bombing started. A car was going round there, it was shooting at the Americans and the Americans bombed the houses and the schools. It was haphazard bombing.”*

Fallujah resident, 2004<sup>106</sup>

.....

Jo Wilding, a human rights activist in Fallujah during the first assault, wrote on 17 April 2004: *“The aerial bombardment starts with the night and we stand outside watching the explosions and the flames. The cacophony of planes and explosions goes on through the night. I wake from my doze certain that rockets are being fired from the garden outside our room. Rhythmic, deep, resonating, the barrage goes on and the fear spreads in my belly anticipating an explosion from the air to stop the rockete[er].”*<sup>107</sup>

In one attack, on 7 April 2004, Brigadier General Mark Kimmitt, said that US forces dropped two 500 pound bombs at the wall of the Abd al-Aziz al-Samarrai mosque: *“My understanding is that we went after one set of insurgents that were hiding behind the outer wall of a mosque, not the mosque itself.”*<sup>108</sup> Lieutenant Colonel Brennan Byrne had ordered the attack on the mosque when his troops were fired upon by 30 to 40 insurgents, yet it later emerged that no bodies could be found.<sup>109</sup> Hospital sources reported that at least 45 Iraqis were killed and 90 injured that day in attacks across Fallujah. Among the casualties were a civilian family sitting in a car parked behind the Abd al-Aziz al-Samarrai mosque when it was bombed.<sup>110</sup>

### ‘Permissible limits’

Colonel Earl S. Wederbrook, 1st Marine Air Wing staff, described how the rules of engagement for air strikes in Fallujah *“required the air force to use munitions that would minimise collateral damage.”* He also emphasised that *“certain buildings and all mosques were strictly off limits... map drills were held every night pointing out buildings that were not authorized as targets”* and that *“pilots*

*memorized the collateral damage estimates and danger close distances of all their available ordnance.*"<sup>111</sup>

Despite withdrawing in April 2004, the US military continued launching air strikes on Fallujah, particularly targeting safehouses used by Abu Musab Zarqawi, an insurgency leader linked to al-Qaeda, and loyalists forces. On 19 June 2004 the US bombed a residential neighbourhood with the aim of destroying a safe house used by Zarqawi loyalists. Residents said, however, that around 20 people were killed, including women and children.

A statement about the attack read: *"It is standard operating procedure to conduct a detailed collateral damage estimate prior to approval of this type of mission. The collateral damage estimate was within permissible limits, and this operation was within standing rules of engagement."*<sup>112</sup>

What exactly defines a 'permissible limit' in these cases is key in evaluating the effectiveness of this measure, potentially a vital and effective tool to minimising civilian casualties. In Iraq, US Defense Secretary Rumsfeld was personally required to authorise strikes that were anticipated to cause more than 30 civilian casualties.<sup>113</sup>

### 32 seconds

The short length of time taken from identifying targets to launching an air strike was a growing concern throughout the operations in Fallujah. A few months after the April 2004 operation, footage shot in the same month emerged showing a US F-16 fighter pilot requesting permission from ground control to fire upon a group of individuals.<sup>114</sup> In the video he is told immediately to do so, the pilot locks the bomb guidance system, and an attack is launched. The length of the engagement is just 32 seconds.

The military claimed that the ground commander saw the crowd fire at the Marines. But defence experts, when shown the footage, did not accept that the crowd was behaving as an *"offensive military force."*<sup>115</sup>

The US Air Force in Iraq has been criticised for adopting *"an unsound targeting methodology that relied on intercepts of satellite phones and*

*inadequate corroboration of intelligence. Targeting based on geo-coordinates derived from satellite phones in essence rendered U.S. precision weapons potentially indiscriminate.*"<sup>116</sup>

Moreover if the length of time taken from identifying an emerging target to dropping a bomb on the crowd is a mere 32 seconds, there would be no time for a detailed assessment of the damage likely to arise or of incidental harm to civilians. A US government source acknowledged that in some cases, adequate collateral damage estimates for leadership strikes could not be carried out due to time constraints.<sup>117</sup>

The emergence of a new target in the dynamic heat of battle does not excuse a force from its obligation to conduct comprehensive estimates of the potential impact of any air strike on civilians and civilian objects. A failure to conduct such assessments drastically increases the risk that any eventual strike will lead to civilian casualties, particularly if it is carried out in a populated area.

### Civilian cost

The Iraqi Red Crescent Society described the situation in Fallujah as a *"big disaster."*<sup>118</sup> The Nazzal Emergency hospital in Fallujah was razed to the ground in an airstrike on 6 November.<sup>119</sup> Dozens of homes, as well as a nearby medical supplies storeroom, were destroyed in the attack.<sup>120</sup> Remaining hospitals and medical staff were in short supply of blood, oxygen and antiseptics, and there were reports of clerics turning a football field into a makeshift cemetery.<sup>121</sup> Those who remained in the city resorted to desperate measures to survive. One Fallujan resident, Mashadani, a car mechanic, stayed in the city believing that the US military would not harm his family. However, bombs struck close to his home, and his family were forced to drink water from a hole they had dug when water supplies ran out.<sup>122</sup>

In its analysis of the first assault on Fallujah in April 2004, Iraq Body Count concluded that between 572 and 616 of the approximately 800 recorded deaths from armed violence in the city were civilians (as high as 69%). Over 300 of these were women and children.<sup>123</sup> AOAV analysis of IBC data suggests that at least 674-766 people died in bombing and shelling during the second operation.<sup>124</sup>

# THE AFTERMATH AND LESSONS LEARNED

Heavy-handed tactics employed by US forces in Fallujah were heavily criticised during the UK Chilcot Inquiry into the Iraq war. As Sir David Richmond stated: *“What the Americans were doing in Fallujah which was being broadcast all over the Arab media was causing serious problems all round, certainly the Sunni part of Iraq but also I think the Shia part of Iraq.”*<sup>125</sup> To some, the conduct of US forces reinforced the idea America was out to win a war, while Britain was there to fight in a counterinsurgency operation.<sup>126</sup>

*“The destruction of that city [Fallujah] in the process is redolent of an attitude during the Vietnam War. To paraphrase an officer from that time, ‘we had to destroy the city in order to save it’.”*

Dr Rod Thornton, counterinsurgency expert, House of Commons testimony.<sup>127</sup>

It was also thought by some, including then-Prime Minister Tony Blair, that the heavy US response in Fallujah in 2004 had a negative impact on other cities in Iraq, stirring hostility towards troops based there.<sup>128</sup> Iraq saw a surge in violence across the whole country as the US began its first offensive in Fallujah. April 2004 was at that point the deadliest month since Saddam Hussein was ousted a year earlier.<sup>129</sup>

By contrast, UK forces likely reduced the risk of civilian casualties significantly by not attacking populated areas of Basra with heavy explosive weapons. UK security personnel extended this approach to law enforcement, where they sought to adopt a firm but friendly persona when patrolling the streets of the city (e.g. removing helmets

and replacing them with berets). This approach drew upon experience in Northern Ireland and the Balkans.<sup>130</sup>

## US

Whether the US military accepted the criticism from allies is difficult to assess, although operations carried out by the British forces attracted praise from their American counterparts. According to the New York Times, a Pentagon official acknowledged that a battle plan for Baghdad *“was informed at the last minute”* when US field commanders consulted British officers about their success in Basra.<sup>131</sup>

Furthermore, US military manuals began to explicitly acknowledge how collateral damage could negatively impact operations. A counterinsurgency manual released in December 2006 indicated how personnel *“...should calculate carefully the type and amount of force to be applied and who wields it for any operation. An operation that kills five insurgents is counterproductive if collateral damage leads to the recruitment of fifty more insurgents.”*<sup>132</sup>

In 2012, the US military released the 2012 Civilian Casualty Mitigation manual.<sup>133</sup> Perhaps the first manual of its kind<sup>134</sup> in directly addressing how



Marines fire M198 howitzer at Umm Qasr, near Basra, Iraq.





Air strike on suspected insurgent stronghold, Fallujah, 8 November 2004.

RoE relate to casualty mitigation, it states how civilian casualties can cause “*ill will*” in the host nation, as well as increase political pressure on the military that “*can limit freedom of action of military forces*.”<sup>135</sup> It suggests that restrictive rules of engagement can help reduce casualties, and adds that even though RoE may authorise force, it is not necessary in every case.

The manual also presents a six-step mitigation cycle to reduce casualties: prepare, plan, employ, assess, respond, and learn. In the first stage, the manual suggests that casualty mitigation should be incorporated into military exercises, and that commanders should avoid “*focusing exclusively on fighting against a hostile enemy, as this could reinforce a “shoot first” mentality*.”<sup>136</sup>

In the planning stage, the military must have an “*accurate picture of the operational environment, including civilian concentrations*,” and as for employment, it suggests that indirect fire and air strikes should be restricted or reserved for a high-level approval authority. Troops should also conduct battle damage assessments, and respond to casualty incidents by treating the wounded or offering compensation for losses. The last step recommends that lessons learned on casualty mitigation can be incorporated into military exercises, thus completing the cycle.

## UK

As for the RoE for the UK, there is an indication that they were changed in 2004, a year after the

Battle of Basra. In 2006, a memorandum from the Ministry of Defence submitted to parliament stated that the RoE were “*updated in June 2004 and took full account of lessons learned in all recent operations. UK ROE doctrine is therefore up to date and has been operationally tested in recent war and high tempo peacekeeping operations*.”<sup>137</sup> However it is hard to measure and identify such changes as the relevant information remains classified.

One clear and striking change to UK military practice since 2003-4 that the US has not followed is the decision to sign up to the Convention on Cluster Munitions. The Cluster Munitions (Prohibition) Act of 2010 makes cluster bombs the highest category of prohibited exports, and illegal under any circumstances for UK forces to ever in the future.<sup>138</sup>

As far as drawing broader lessons goes, as stated earlier, secrecy surrounds the UK rules of engagement, and Freedom of Information requests submitted by AOA have thus far yielded little further information.



UK Lynx helicopter fires a rocket in to Basra, 2003.



# CONCLUSION

Operations in Iraq, either implicitly or explicitly, were fought with the justification of ultimately improving the protection of civilians. Meanwhile, and recognising that all military engagements are inevitably politicised and subjected to public scrutiny, this was arguably the first 'Youtube' conflict ever fought. The level of public pressure, heightened by a rolling 24-hour media scrutiny, was particularly high throughout the conflict in Iraq.

This had a significant bearing on how militaries conducted themselves as regards the protection of their own troops, and how they were seen to be protecting civilians from actions of the coalition forces.

Rules of engagement (RoE) primarily serve the purpose of attempting to strike a balance between the protection of troops with the protection of civilians. The central tenets of international humanitarian law (IHL), and its protection of civilians, were pivotal in the drafting and application of RoE of both states considered in this report. Both US and UK forces emphasised through their RoE that avoiding civilian casualties or damage to civilian structures was a high priority.

While involving clearly differing contexts, operations in Basra and Fallujah both presented the US and UK with the same dilemma: whether or not to deploy explosive weapons against an opposition choosing to operate in a populated area, thus greatly endangering civilians.

During the course of operations, both US and UK forces were actively prevented from using the full means of force at their disposal. However the UK strategy of almost entirely avoiding firing explosive weapons into populated areas can be seen to have contributed significantly to reduced civilian casualties.

US practice appears to have offered greater room for interpretation among individual commanders. This is evidenced in the high level of firepower

used in Fallujah in November 2004, to such an extent that it created hostility and criticism even among its own partners in the conflict. The wider military mindset that emphasised heavy firepower as a first option is evidenced by the fact that a commander was under no requirement even to report the heavy use of explosive weapons to his superiors.

Some measures, including undertaking extensive collateral damage estimates before strikes, taken by US and UK forces at the time were positive from a humanitarian viewpoint. Ultimately, however, the most significant measure that can be taken to protect civilians, as shown by UK ground forces in Basra, is restraint in the decision to deploy explosive weapons in populated areas.

How far have the UK and US moved on since the early days of the Iraq war? More than a decade has passed, and while much of the body of military manuals and directives in place at the time likely have relevance to these two respective forces, it would be galling to think that military practice to better protect civilians has stalled completely in the last ten years.

Both forces should take the opportunity provided by the United Nations Secretary-General in October 2014 to share examples of their policies on the use of explosive weapons in populated areas to show how far they have advanced since the operations in Basra and Fallujah.<sup>139</sup>

When used in populated areas, explosive weapons cause a predictable pattern of death and injury to civilians. Stronger standards in military rules of engagement can make a substantial difference, but ultimately it is only by ending the use of heavy explosive weapons in populated areas that we will see a significant reduction in civilian suffering.

# RECOMMENDATIONS

- State forces should immediately end the use of explosive weapons with wide-area effects in populated areas.
- States should work collectively with others towards an international commitment aimed at preventing such use.
- In line with a request from the United Nations Secretary-General to all Member States, the UK and US should join other governments to share examples of good practice and policy in the use of explosive weapons with wide-area effects in populated areas.
- States should recognise the pattern of unacceptable harm caused by the use of explosive weapons in populated areas, and should publicly condemn any such use at every opportunity, including but not limited to the UN Security Council debates on the Protection of Civilians.
- States, international organisations, and non-governmental organisations should gather and make available data on the impacts of explosive weapons. More should be done to protect and support the organisations and individuals that work to gather such data.
- The United States should sign up to the Convention on Cluster Munitions and outlaw the use of these inhumane weapons.
- With Iraq continuing to see high levels of civilian casualties from explosive weapons, particularly IEDs, more must be done to support the Iraqi authorities and humanitarian agencies in the country to reduce the impact and incidents of attacks. This includes tackling the traffic and transfer of source materials for IEDs, better regulating stockpiles of ordnance, clearing explosive remnants of war in the country and ensuring that victims have properly-funded, timely and developed support.

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- 13 In October 2003 for example, Parliamentary Under-Secretary of State for the Ministry of Defence Lord Bach said “it has been the practice of successive United Kingdom governments not to comment on certain aspects of operational policy, including rules of engagement,” [www.publications.parliament.uk/pa/ld200203/ldhansrd/vo031013/text/31013-01.htm](http://www.publications.parliament.uk/pa/ld200203/ldhansrd/vo031013/text/31013-01.htm) (accessed on 22 October 2014).
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# ACTION ON ARMED VIOLENCE

Action on Armed Violence (AOAV) is a London, based charity that has a central mission: to reduce harm and to rebuild lives affected by armed violence.

We do this by carrying out field work, research and advocacy to reduce the incidence and impact of global armed violence.

The number of fatalities from armed violence is estimated to be over half a million people killed every year. Around two thirds of these violent deaths are estimated to occur outside conflict situations. Poorer countries are particularly badly affected.

We seek to remove the threat of weapons, monitor the impact of explosive weapons around the world and investigate what causes armed violence – from guns to suicide bombings. We aim to clear land of explosive weapons and work with governments to regulate guns.

We work with victims of armed violence, offering psychosocial assistance, providing opportunities to help them earn a living and to try to reduce conflict at local levels.

We work to build communities affected by armed violence, working with governments and measuring and monitoring the incidences and impacts of armed violence around the world.

To contact AOAV please go to our website: [www.aoav.org.uk](http://www.aoav.org.uk)



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