



MINISTRY OF DEFENCE

OPERATIONS IN IRAQ



First Reflections



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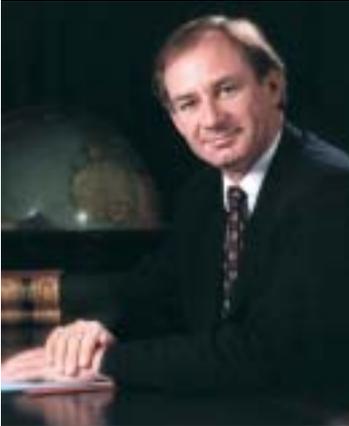
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IRAQ FIRST REFLECTIONS REPORT

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Foreword by the Secretary of State for Defence



On 20 March 2003 a US-led coalition, with a substantial contribution from UK forces, began military operations against the Saddam Hussein regime in Iraq. Just 4 weeks later, the regime was removed and most of Iraq was under coalition control. The success of the military campaign owed much to the determination and professionalism of the coalition's Armed Forces and the civilians who supported them. I regret that, during the course of combat operations and subsequently, a number of Service personnel lost their lives. Their sacrifice will not be forgotten.

The UK is playing a full part in the re-building of Iraq through the establishment of conditions for a stable and law-abiding Iraqi government. This process will not be easy after years of repression and neglect by a brutal regime. Our Armed Forces are performing a vital and dangerous role by contributing to the creation of a secure environment so that normal life can be resumed, and by working in support of humanitarian organisations to help the Iraqi people. They draw on skills honed through years of experience in peace support operations in other parts of the world.

We have already begun a thorough examination of all aspects of the operation - not just the parts that went well, but also the things we could have done better. This analysis will take time, and we will publish a full report in due course. The aim of this report is to set out an account of the operation to date, and provide some early indicators of lessons for the future.

While the search for improvement goes on, we can be justifiably proud of the UK's significant part in the successful operation to create the conditions for the disarmament of Iraq and of the achievements of our world class Armed Forces who, once again, have served our country with distinction.

Geoffrey Hoon

CHAPTER 1: POLICY

BACKGROUND TO THE OPERATION

1.1 After the expulsion of Iraqi forces from Kuwait by UN coalition forces in 1991, UN resolutions imposed strict conditions on Iraq in order to remove the threat Saddam Hussein's regime posed to neighbouring countries. These included the destruction, removal or rendering useless of Iraq's weapons of mass destruction under the supervision of inspectors from a UN Special Commission (UNSCOM) and the International Atomic Energy Authority (IAEA). In 1998, after several years of prevarication, obstruction and concealment by the Saddam Hussein regime, the UNSCOM and IAEA inspectors were withdrawn. UNSCOM was replaced in 1999 by the UN Monitoring Verification and Inspection Commission (UNMOVIC) but Iraq refused to cooperate with the new inspection regime.

1.2 In November 2002, the UN declared that it would no longer tolerate the Iraqi regime's continuing defiance of international law. UN Security Council Resolution (UNSCR) 1441 was unanimously adopted, declaring Iraq to be in material breach of previous resolutions, and setting out new procedures for the conduct of inspections, together with the threat of serious consequences in the event of Iraqi non-cooperation. The resolution provided a final opportunity for Iraq to comply with its disarmament obligations and UNMOVIC inspectors were eventually allowed back later that month. Subsequent reports by UNMOVIC and the IAEA showed clearly, however, that not only was Iraq failing to offer active co-operation but it was engaged in a systematic pattern of concealment and deceit.

1.3 In view of the Iraqi regime's failure to comply with the will of the United Nations, and based on the authority provided by a series of UN resolutions since 1991, the UK joined a US-led coalition that was prepared to use force as a last resort to secure Iraqi compliance. The Government's overriding political objective was to disarm Saddam of his weapons of mass destruction, which threatened his neighbours and his people. It also undertook to support the Iraqi people in their desire for peace, prosperity, freedom and good government. The Government emphasised that, if forced by Saddam to take the military route to achieve the disarmament of Iraq's weapons of mass destruction, it would do all it could to minimise civilian casualties and damage to essential economic infrastructure. It would also mobilise the international community to provide emergency humanitarian relief.



1.4 On 24 February, the UK, the US and Spain tabled a draft resolution, making it clear that Iraq had failed to take the opportunity provided in UNSCR 1441. Despite significant diplomatic efforts, it was reluctantly concluded that a Security Council consensus on this new resolution would not be possible. Faced with continuing Iraqi intransigence, coalition forces commenced military operations against the Saddam Hussein regime on 20 March 2003.

Soldiers from the 1st Battalion Irish Guards deployed to the Gulf after two months of final training and preparation

CHAPTER 2: PLANNING AND PREPARATION

2.1 In order to be ready to undertake military action in the event that diplomacy failed, prudent military planning had to begin months beforehand. At that stage we did not know whether military action would be required, nor what form it might take. We therefore had to be flexible in approach.

Early Preparations and Decisions

2.2 Supporting diplomacy while preparing to use force if that diplomacy failed, presented difficult choices and required a fine balance to be struck. We did not wish to prejudice the UN process by making overt military preparations too soon. On the other hand, delaying planning until diplomacy had been exhausted would have given Saddam's regime months to prepare for war, or even have allowed him to conduct pre-emptive strikes against Iraq's neighbours and/or coalition forces in the region. Moreover, we hoped that measured military preparations would strengthen diplomatic efforts by demonstrating the resolve of the international community (experience having shown that Saddam Hussein was unlikely ever to comply with his obligations without a credible threat of military action).

2.3 As a matter of course, given the nature of its business, the Ministry of Defence (MOD) devotes significant effort to thinking about and planning for possible contingencies. This was particularly true in the case of Iraq, given that it was already an operational theatre with US and UK aircraft enforcing the No-Fly Zones. In relation to this specific operation, the Prime Minister stated on 24 September 2002 that "there must be genuine preparedness and planning to take action" if diplomacy failed. Genuine preparedness involved many strands of action. In late November 2002 the Defence Secretary announced that an initial assessment of the possible requirement for reservists was underway. The need for additional military equipment and specific modifications was also reviewed. While the Armed Forces are equipped for a range of contingencies, it is not cost-effective to stockpile equipment and stores for every conceivable operation. We therefore look carefully at the needs of every operation or possible operation and fine tune our capability and fill gaps through the well established Urgent Operational Requirements (UOR) process. This process was announced in Parliament on 25 November. Further preparations included approaching the shipping market in mid-December to tender for transportation vessels, and improving the readiness of our troops by undertaking specific training and reducing the notice to move of some units.

UK equipment arriving at
Kuwait City Port

Planning

2.4 While overall planning for the operation was led by the United States, the UK was fully involved, including through personnel embedded in US Central Command in Tampa and elsewhere. The plan evolved over time, and was sufficiently flexible to respond to changing circumstances. Since our aim was to achieve Iraqi compliance by diplomatic means if possible, it was impossible to know whether or when operations might need to begin. Despite these variables, the essence of the plan remained consistent, with the focus on mounting a rapid, synchronised and precise campaign to overwhelm Saddam Hussein's regime and its security forces and minimise the risk of civilian casualties or damage to Iraq's essential services. We thereby aimed to prevent Saddam Hussein from putting into effect his most destructive options, such as using weapons of mass destruction, destroying civil infrastructure or creating humanitarian or environmental catastrophes (as he had done in Kuwait when he withdrew Iraqi forces in 1991).

2.5 As planning developed, the Government sought to provide a balanced, flexible and potent contribution to coalition forces, capable of playing a major role in any operation. Initial plans envisaged significant UK and US land and air forces operating from the north and deploying through Turkey as well as from Kuwait in the south. It became increasingly apparent that it would be difficult for the Turkish Government to secure parliamentary approval for such deployments. We therefore developed alternative plans, under which UK ground forces would play a key role in southern Iraq and enable US forces to advance more rapidly from south to north. Similarly, we devised alternative arrangements in the south for the UK air contribution. In the event, the decision to focus the UK role in the south, both in the opening assault and then in holding ground to facilitate a high-tempo US advance on Baghdad, resulted in our making a significant contribution to the overall success of the operation. The regime's resistance in northern Iraq, and the ability of its forces to manoeuvre in a coherent way, proved to be very limited.

Target Selection

2.6 Planning for the air campaign included the development of a list of potential targets that would help the coalition to achieve its overall objectives. Over 900 potential target areas were identified in advance. All targets were derived from the campaign plan and were selected to achieve a particular military effect (such as the degradation of Iraqi command and control systems). Operating within parameters agreed by Ministers, Commanders taking targeting decisions had legal advice available to them at all times during the conflict and were aware of the need to comply with international humanitarian law, the core principles of which are that only military objectives¹ may be attacked, and that no attack should be carried out if any expected incidental civilian harm (loss of life, injury or damage) would be excessive in relation to the concrete and direct military advantage expected from the attack. Extensive scientific support including detailed computer modelling was used in assessing potential targets. Strong coordination between the MOD, the Permanent Joint Headquarters (PJHQ) at Northwood and the in-theatre National Contingent Command helped ensure coherent target planning (a lesson from previous operations). The Department for International Development was also consulted on key humanitarian infrastructure issues. The process for approving all targets for UK aircraft, submarine-launched cruise missiles or for coalition aircraft using UK facilities was conducted with appropriate political, legal and military oversight at all levels. We also influenced the selection and approval of other coalition targets.

¹ Military objectives are objects which, by their nature, purpose, location or use make an effective contribution to military action, and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage.

UK Force Contribution

2.7 Our maritime contribution to the coalition was the first to be announced, on 7 January 2003, and built on the standing Royal Navy presence in the Gulf. Naval Task Group 2003, led by HMS ARK ROYAL, which was already due to sail that month as a routine deployment to the Gulf and Asia/Pacific regions, was expanded to a much larger force totalling some 9000 personnel. It included submarines armed with Tomahawk cruise missiles and a significant amphibious capability with the helicopter carrier HMS OCEAN, Headquarters 3 Commando Brigade Royal Marines, 40 Commando and 42 Commando (some 4,000 personnel), and hospital facilities in RFA ARGUS. This was the largest amphibious force deployed since 1982. The Task Group would provide force protection, and conduct mine counter-measures operations as well as providing vital sea-based logistics in support of joint force operations on shore.

2.8 On 20 January, the Defence Secretary announced the deployment of a major ground force including reservists, equipped with Challenger 2 tanks, Warrior armoured infantry fighting vehicles, AS90 self-propelled guns, and a range of helicopters. This force, which eventually totalled some 28,000, would be the largest land force deployment since the Gulf conflict in 1991, and was drawn from units based in the UK and Germany. At the beginning of operations, 16 Air Assault Brigade represented about half the coalition's air assault capability, and 7 Armoured Brigade provided a significant proportion of its tank forces.

RAF aircraft such as this Harrier GR7 operated around the clock



2.9 The Royal Air Force already maintained a presence of some 25 aircraft and 1000 personnel in the Gulf, flying sorties over Iraq to enforce the No-Fly Zones and to restrict the regeneration of Iraqi air and Integrated Air Defence capabilities. On 6 February the Defence Secretary announced that the RAF contribution would be increased to around 100 fixed wing aircraft manned and supported by a further 7000 personnel. The Force would include E3-D Sentry aircraft for airborne warning and control, Nimrod and Canberra reconnaissance aircraft, VC10 and Tristar air refuelling aircraft, Hercules transport aircraft, Tornado F3 air defence aircraft, and Tornado GR4 and Harrier GR7 aircraft. The latter two aircraft types would be armed with precision-guided weapons, including the new Storm Shadow stand-off missile fitted to Tornado GR4, and would also provide the coalition with valuable tactical reconnaissance. In addition, the Joint Helicopter Command deployed more than 100 helicopters, including Puma and Chinook support helicopters.

A mortar team engages enemy targets south of Basrah



2.10 Overall, the UK contribution amounted to some 46,000 personnel out of a total of some 467,000 coalition forces. Around 1000 of the UK personnel were located in the National Contingent Headquarters. UK Forces offered important specialist capabilities such as RN mine-clearance, Army explosives clearance and RAF tactical reconnaissance. In all, some 20 countries offered or provided military forces or use of military bases to the coalition. Many others provided crucial assistance with intelligence, logistics and the deployment of combat units. President Bush confirmed on 18 March that over 40 countries were supporting the coalition.

Working in a Coalition

Working in a coalition brings political, diplomatic and military advantages, including the aggregation of capabilities, flexible war-fighting options and the sharing of intelligence and risk. Indeed, the operation showed the importance of constructing a force package that allowed a greater range of operational options than the enemy. The importance of the UK's contribution to the coalition lay in the military capability we provided to the front line both in the core coalition disciplines and in unique specialist areas.

At the operational and tactical levels, the planning and conduct of the operation was facilitated by the close professional relationship that has grown up between the UK and US, not only as leading members of NATO, but also through numerous bilateral institutional and personal contacts at every level. Equally important were the benefits of training and operating together over many years, especially in the Gulf, Afghanistan and the No-Fly Zones over Iraq.

Given US technological and military dominance, we should continue to track, align with and integrate US developments in areas where our force balance and resources allow, particularly in terms of the organisation of enhanced HQs, communications and information systems, and Combat Identification (ID). We should also ensure that our command structures can engage and influence key US decision-makers with appropriate weight and at the right levels.

Based on recent experience, the UK must plan to work in "coalitions of the willing" for future operations as well as within established structures. This may result in the requirement to work with unfamiliar partners, with the attendant challenges associated with force packaging, training, and standardisation of procedures and equipment.

Reserves Call-out

2.11 Initial call-out notices for reservists were issued in early January, and by the time operations began, over 5000 reservists from all three Services had been accepted into service - by far the largest call-up since the Suez crisis of 1956. The 1991 Gulf conflict highlighted the importance of having structured and systematic mobilisation and demobilisation procedures. These lessons were first put into practice in the mobilisation for service in the former Yugoslavia and have been further refined since then. Work is in hand to review mobilisation and employment issues. That said, the timely way in which reservists were accepted into service highlights the improvements we have made in the process in recent years.



A British military camp in Kuwait

The Deployment Phase

2.12 The build-up of military force in the Gulf region was conducted in a rapid but measured fashion, in the hope that the growing pressure would convince Iraq to comply peacefully with its international obligations. UK deployments to theatre began in earnest in early January. The Naval Task Group and Amphibious Ready Group arrived on 12 February, integrating with US and coalition maritime forces in theatre and was ready for operations by 15 February. They joined a UK force of four Mine Counter-Measure (MCM) vessels and RFA SIR BEDIVERE which had been in theatre since November on a routine training deployment. Land force deployments began with the flow of enabling equipment and stores by sea and air. The first troops began arriving in theatre in late January. By 18 March the deployment of the combat forces was complete, together with their supporting infrastructure, including accommodation (mostly tented), welfare telephone facilities to keep in touch with families, equipment and stores. The additional RAF air assets began to flow into theatre in February and had achieved full combat effectiveness by 16 March.

2.13 By 18 March, we had deployed a formidable joint force of 46,000 men and women and their supporting equipment over 3,400 miles to theatre. This had to be done in significantly less time and with a larger force than the planning targets assumed by the Strategic Defence Review (SDR). This massive logistic effort was achieved using 670 aircraft sorties and 62 ship moves in half the time it had taken to deploy a similar sized force during the 1991 Gulf Conflict. In all, the UK's logistics organisation shipped enough vehicles of all types to have stretched 82 miles from London to Southampton if laid end-to-end. This required a large volume of chartered shipping and air assets.

In-theatre training

2.14 By 3 March, in theatre training had begun, with newly-deployed RAF aircraft patrolling the Southern No-Fly Zone and, from 11 March, additional Royal Navy assets were taking part in the anti-smuggling, patrolling and surveying operations. The Royal Marines conducted initial amphibious training in Cyprus, and subsequently completed integration training with US forces in the Gulf.

Planning - First Reflections

- The successful deployment of a joint force of some 46,000 personnel confirmed the coherence and validity of the UK's expeditionary strategy and was an exceptional achievement in the short timescale for its generation.
- It was decided, in view of the importance of the operation, that we wanted to make available UK forces whose size exceeded the parameters previously set in the SDR, given other commitments at the time.
- Mobilisation of the Reserves and auxiliaries proceeded smoothly, although in future there is a need to consider further the time gap between call out and reporting for duty. The need for structured mobilisation and demobilisation procedures was confirmed by our experience in the 1991 Gulf conflict and reinforced by subsequent reservist deployments to the Balkans and Afghanistan. The establishment of the Reserves Training and Mobilisation Centre at Chilwell did much to streamline mobilisation procedures.
- The experience gained in planning recent operations in Afghanistan, Sierra Leone and Kosovo, and Exercise SAIF SAREEA II in Oman, proved invaluable in planning this operation.
- Planning for coalition operations with the US underlined the importance of close liaison at all levels of the military chain of command through the early embedding of UK personnel in key US HQs.
- It is important to develop a range of planning options to cater for possible uncertainties ahead of operations: for example, as a result of difficulties associated with access, overflight or basing.
- Host Nation Support cannot be taken for granted.
- Despite the challenges experienced in securing overflight or basing rights, many countries assisted coalition access into theatre, particularly our established friends in the Gulf region. Most notably, Kuwait offered the ability to build-up significant land, air and logistic support, the pre-positioning and basing of substantial amounts of combat power and a mounting point for combat operations.
- UORs formed a key part of the planning process, and it is clear that they played an important role in operations. The role of UORs will be reviewed further as in depth analysis becomes available.
- Planning focussed on providing military options in support of the diplomatic process. This reflected the need to avoid appearing to be already committed (which could undermine the diplomatic process), and the need to deploy in the required timescale should force be necessary.
- While a substantial humanitarian crisis did not eventually arise in Iraq, it was important to plan with the Department for International Development and others to be ready to meet immediate humanitarian needs during and following the conflict should the need arise.

Chinook helicopters landing and taxiing at an RAF base in the Gulf



CHAPTER 3: THE CAMPAIGN

3.1 By 18 March the Government and its coalition partners had concluded that the diplomatic process had been exhausted and that, unless Saddam Hussein complied with a final ultimatum, there would be no alternative to military action against the Iraqi regime. The Government secured Parliamentary approval on that day for the use of “all means necessary” to ensure the destruction of Iraq’s weapons of mass destruction.

Military Campaign Objectives

3.2 The Defence Secretary published the objectives for the military campaign in Parliament on 20 March (see Annex A). The overriding objective was to disarm Iraq of its weapons of mass destruction. To achieve this we would need to overcome the Iraqi security forces and remove the Iraqi regime, while denying them the ability to use weapons of mass destruction. It would also be essential to secure Iraq’s key economic infrastructure from sabotage and wilful destruction by Saddam Hussein’s forces, and deter wider conflict both inside Iraq and in the region. Moreover, this had to be accomplished with minimum impact on the Iraqi people, with whom we had no quarrel.

Operations begin

3.3 Although some preliminary operations against Iraqi artillery missile and air defence systems had been carried out on 19 March to reduce the threat to coalition forces in Kuwait, the military campaign proper began in the early hours of 20 March some 90 minutes after the expiry of a US ultimatum for Saddam Hussein to leave Iraq. Following intelligence about the location of senior members of the Iraqi leadership, US F-117 stealth fighters and a number of cruise missiles struck regime targets around Baghdad. Iraqi forces responded by launching five missiles into Kuwait (and more subsequently), forcing our troops and Kuwaiti civilians to don Nuclear Biological and Chemical (NBC) protective clothing as a precaution.

UK Operations

3.4 The coalition plan (described at para 2.4) envisaged simultaneous air and ground operations to overwhelm the regime. The land offensive began on 20 March, less than 24 hours after the first bomb was dropped. The UK planned to fight a joint campaign utilising sustainable, balanced forces that would provide commanders with the flexibility to respond to enemy actions and the emerging features of the conflict. Coalition aircraft maintained air superiority, provided Close Air Support and aerial reconnaissance and shaped the battlespace by disrupting enemy forces. Aircraft tasking was helped by embedding a network of air operation coordination and liaison cells in the land forces’ chain of headquarters. Helicopters from the UK Joint Helicopter Command also provided crucial combat support to the ground operation from bases on land and at sea. UK Special Forces were active from an early stage; however, in accordance with established policy, this report does not comment on their activities.

3.5 The first objective was to seize the Al Faw peninsula and key oil installations, to secure access to the strategically important port of Umm Qasr. In an excellent example of joint and combined operations, coalition forces, led by 40 Commando (and subsequently 42 Commando) Royal Marines, launched an amphibious assault on the Al Faw peninsula, using helicopters from the Joint Helicopter Command and a variety of landing craft, supported by three Royal Navy frigates which provided Naval Fire Support. The securing of the Al Faw peninsula and the Rumaylah oilfields by UK and US forces, to whom UK NBC troops and engineer elements had been attached, was a key early success for the coalition. Although some oil wells had already been set alight, there was not the widespread sabotage that had been feared. Within 48 hours Umm Qasr had been captured and was being secured by the US 15th Marine Expeditionary Unit under the command of 3 Commando Brigade Royal Marines.

3.6 The Al Faw peninsula was now largely in coalition hands, allowing US forces to press on to Baghdad. It was important to prevent Iraqi forces using Basrah, the second largest city in Iraq, as a base for attacks on coalition lines of communication. Within four days UK forces had taken Basrah International Airport, despite encountering significant Iraqi resistance, and were expanding their area of control throughout the surrounding region. The original coalition plan did not require UK forces to capture Basrah: their objective was to protect the right flank of US forces as they advanced north by suppressing Iraqi resistance around the city, while monitoring the situation inside the city to ensure that Iraqi civilians did not suffer. Basrah was not entirely surrounded at any stage. Local civilians were free to enter and leave as they wished, though they came under fire from forces loyal to Saddam Hussein. As UK forces gathered intelligence on the ground, they were able to conduct precision attacks, from both the ground and air, against targets such as headquarters or meeting venues of the Ba'ath Party.

3.7 After several days of raids into the town of As Zubayr, south-west of Basrah, UK forces entered the town. By 6 April, it was judged that conditions were also right to enter Basrah in strength. UK forces launched assaults from three directions, encountering only patchy resistance,

UK artillery in action



and stormed the Ba'ath Party headquarters. Careful timing minimised casualties on both sides. UK forces were welcomed by the local people, and although there was some looting during the first few days as the population seized the opportunity to demonstrate its hatred of the Ba'ath regime, the city soon began to return to something resembling "normal" life. UK commanders quickly established contacts with local leaders and assisted in restoring a functioning police force. The first joint UK-Iraqi police patrols took place just one week after Basrah had been liberated.



A Royal Engineer clears a route through a minefield in southern Iraq

3.8 The remit of UK forces included making secure the whole of Basrah province and then Maysan province around Al Amarah. In the early days of the campaign UK bomb disposal experts worked with specialist engineering teams to clear access to key areas of the Rumaylah oilfields so they could be returned to operating capability as soon as possible. By 1 April, UK forces in As Zubayr had exchanged combat helmets for berets. Less than two weeks after the start of the operation, schools and markets had started to re-open in some of the areas where UK forces were operating, local hospitals were offering treatment for non-regime patients, and overt Iraqi militia presence had significantly reduced. By 22 April, Basrah province was sufficiently safe for non-military organisations to begin their own humanitarian work.

Asymmetric Operations

Clearly, despite their numerical advantage, the Iraqi armed forces could not expect to match the coalition in regular combat. Even so, the failure of Saddam's regime to employ its conventional military capabilities to best effect was striking. This may reflect the undermining of its command and control mechanisms early in the coalition campaign, as well as the reluctance of regular forces to fight in defence of an unpopular regime.

The full range of the Iraq experience will need to be reflected in future training and equipment provision. The Iraqi regular army put up stiff resistance in places, but mostly either surrendered or fled, abandoning their equipment and clothing. The greater threat to the coalition, particularly to lines of communication and rear areas, was from paramilitary and irregular forces closely associated with the Saddam regime. Such forces were also probably responsible for much of the resistance encountered from regular army units that did fight, whose soldiers in some cases appeared to have been coerced by threats against themselves and their families.

The Iraqis used suicide bombers in the attack on a checkpoint north of An Najaf, which killed four US soldiers. Combatants who were not in military uniform could not be distinguished from civilians, while others showed the white flag when still harbouring intent to fire. While such tactics did not have a significant impact, they showed a disregard for the provisions of the Geneva Convention, put the Iraqi population at risk, and presented the coalition with a challenge as to how to respond. The UK's experience of asymmetric tactics in Northern Ireland proved invaluable and contributed to the early successes our forces enjoyed in southern Iraq. However, the implications for, and limitations on, conventional forces fighting in urban environments will need to be considered - most training is conducted in clear, simple battle-space and needs better to reflect the complexity of modern engagement. Overall, it would appear that UK forces need to continue to be configured, trained and equipped to move from war-fighting to peacekeeping (which may include internal security duties). Above all, the operation highlights the value and potential of agile light forces in responding to asymmetric approaches.

Current and emerging asymmetric threats mean that the risk to coalition shipping needs assessing for all stages of transit. The RN committed significant resources to protect from potential terrorist attack some 60 UK chartered merchant ships bringing in over 95% of all UK military equipment, as well as 16 high value RN and RFA vessels, over a 5000 mile route. Over 50% of the deployable fleet was engaged in escorting duties in known threat areas and choke points.

The push for Baghdad

3.9 UK forces' control of south-east Iraq helped US troops to push swiftly towards Baghdad. Within four days of the start of the operation the US Army was at An Najaf, some 60 miles from Baghdad, while US Marines were pressing north along a different route towards Al Kut. After several days of consolidating their position while attacking Iraqi forces with artillery and aircraft, US forces engaged the Republican Guard divisions around Baghdad. By 4 April they had seized the city outskirts, including the International Airport, and began to make a number of successful forays within the city boundaries.

3.10 On 7 April, while the city approaches were being secured, the US made an air strike on a building in Baghdad following intelligence that it was being used by senior Iraqi officials including Saddam. The following day saw remarkable news footage of US troops visiting Saddam's palaces in central Baghdad, and that night US troops maintained positions in central Baghdad overnight for the first time. On 9 April, sensing they were finally free, crowds gathered in Baghdad to welcome coalition forces and destroy icons of the Saddam regime. By now the west and north of Iraq had largely been secured. A few days later the northern cities of Tikrit, Mosul and Kirkuk fell to coalition troops. On 14 April the Prime Minister informed the House of Commons that "less than four weeks after the commencement of the war, the regime of Saddam is gone, the bulk of Iraq is under coalition control, and the vast majority of Iraqis are rejoicing at Saddam's departure." And by 1 May President Bush was able to announce the end of major combat operations.

3.11 The continuing operations to stabilise the country and root out pockets of resistance are covered in Chapter 7.

British troops of the 1st Battalion, Royal Regiment of Fusiliers, Battlegroup enters Iraq



Air Campaign

3.12 The achievement of coalition land forces was assisted by the most precise air campaign ever, in which the RAF played a significant part, flying almost 2,500 sorties – some 6% of the coalition total. RAF aircraft released over 900 weapons, of which nearly 85% were precision-guided, while support assets played a pivotal role in the maritime, land and air campaigns. The RAF also made important contributions to airspace control, reconnaissance and transport capabilities. Our tanker fleet in particular was highly valued by the US and dispensed some 19 million lbs of fuel, over 40% of which was given to US Navy and Marine Corps aircraft, significantly enhancing their operations. The air campaign began in earnest on the evening of 21 March, with precision strikes using cruise missiles and guided bombs on several hundred military targets throughout Iraq. Precision strikes continued at lower intensity for several weeks, whilst direct support to ground forces became an increasing proportion of the overall air effort. The combat power of the Republican Guard Divisions defending Baghdad was considerably reduced by precision air attack before they were engaged by coalition ground forces. Up to 700 sorties per day were flown against Iraqi ground forces, with the RAF making a major contribution. The main tasks of the air campaign were:

- to neutralise the Iraqi air force and Integrated Air Defence system;
- to conduct strategic attacks against regime targets;
- to provide air support to coalition land forces;
- to deter and counter the threat from theatre ballistic missiles, especially in the west of Iraq;
- to destroy the Republican Guard divisions.

Every care was taken in the targeting process and the selection of weapons to minimise incidental civilian harm. Our target was the Iraqi regime's military capability, not the Iraqi people.

A VC-10 Air to Air refueller
tanker, refueling Tornado F3s



The Role of Intelligence

The Saddam Hussein regime was secretive and based on fear. It was therefore a very difficult intelligence target with few sources of information. Assessments of Iraq's military capability depended on intelligence gleaned over more than a decade of surveillance and containment, as well as direct familiarity from frequent engagement with elements of it in recent operations. Although we knew much about the broad structure and disposition of Iraqi land and air forces, very little was known about how they planned to oppose the coalition or whether they had the will to fight. Objective analysis had to take into account Iraqi bluster and misinformation. Little opposition was expected from the run down Iraqi navy, but the air force and army remained substantially intact and were organised to resist the coalition, although the levels of training were not assessed to be high. The most determined resistance was expected from the Republican Guard formations and the Integrated Air Defence network. However, many formations, units and systems were dispersed and concealed in Iraqi anticipation of a sustained coalition air campaign prior to a ground assault. It was judged that the regime might use theatre ballistic missiles and possibly weapons of mass destruction if it could make the capabilities available for operational use and secure the obedience of subordinate commanders.

The lack of clear information meant that the coalition did not anticipate that Iraqi organised military resistance would collapse so quickly and completely. This left much of the determined, largely uncoordinated opposition in the hands of army remnants, irregular Feda'yeen, groups of foreign fighters and Ba'athist die-hards, with access to extensive stocks of locally held weapons and ammunition. Only with hindsight was it possible to assess the true state of Iraq's infrastructural, organisational and social collapse, caused by years of official neglect, criminal activity, international sanctions and war damage (some dating back to the war against Iran); hence the critical dependence of the people on the regime and its agents for every element of their daily lives.

Tactical intelligence from a wide diversity of technical and other sources played an invaluable part in the campaign itself. The remarkable tempo and effects generated by land, sea and air operations were directly attributable to the quality, availability and timeliness of the intelligence product, which was significantly enhanced by access to US and other coalition allies. Modern Intelligence Surveillance and Reconnaissance assets helped to provide urban situational awareness as did the effective use of human intelligence. 'Real time' targeting information including Collateral Damage Assessment could be passed back to headquarters and the resulting precision munitions strikes were extremely accurate and successful.

However, in an operation of this scale and complexity a vast amount of information has to be processed and interpreted before it can be used. The recent trend, particularly apparent in this operation, towards a significant increase in the demand for intelligence and a need to service the requirements of rapid, decisive and multi-layered campaigns, has the potential to test severely even the most sophisticated intelligence organisations. Consequently, we will wish, with potential allies and partners, to review our structure and specialist and deployed manning, to ensure their suitability and resilience to meet this challenge. This also implies greater connectivity between the various national and allied elements and access to sufficient robust and reliable communications. Moreover, our work will need to recognise the increased tempo required of intelligence in an era of Network Enabled Capabilities, and the particular requirement for human intelligence, linguistic, imagery and technical skills. We will also wish to ensure that personnel at every level are properly trained and capable of accessing and contributing fully to standard intelligence processes and that we can analyse the full range of battlefield effects as rapidly as possible.

The Role of the Media

The operations in Iraq attracted unprecedented levels of media interest, both at home and across the world. 24 hour news broadcasts dominated the airwaves, with established Western broadcasters such as CNN and the BBC being joined by Arabic broadcasters including Al Jazeera. Building on the experience gained in previous conflicts, the UK and the US each had a system of accredited war correspondents. Some 700 journalists were “embedded” with coalition forces. Advances in technology meant that for the first time, these broadcasters were able to report in real time from the battlefield. While this enabled the public to witness a perspective of conflict seldom seen before, it placed a heavy responsibility on the media to make the correct judgements on what to show - and what not to show. The National Contingent HQ Media Centre and press information centres, all of which had MOD spokesmen attached, helped provide context.

A number of media organisations deployed journalists who worked independently of coalition forces. This raised serious safety issues, and several journalists found themselves caught up in the battle, sometimes with tragic consequences.

The primary aim of MOD’s media effort was to provide accurate and timely information about UK military involvement. We judge this to have been largely successful. MOD’s intention from the outset was to enable UK personnel in theatre to brief the media on operational issues, leaving overarching strategic and political issues for London. During the campaign, theatre commanders and their spokesmen gave press briefings and interviews daily (and frequently more often) to UK and international media. In London, Ministers gave over 100 radio and television interviews to the UK, international and Arabic media and, with the Chiefs of Staff, held several Press Conferences.

Generally, the practice of embedding reporters was regarded as positive. For journalists to be exposed to the first-hand experience of war-fighting should help their understanding and they were on hand to report and confirm coalition success at every stage. Inevitably, the presence of embedded journalists sometimes resulted in disjointed reporting, based on snapshots of individual events and locations, and there were occasions when the media tempo outran the ability of commands and spokesmen to ascertain and confirm details through their own structures. Less significant events risked acquiring an importance that could distort perceptions of the campaign as a whole. Ministerial statements and briefings accordingly needed to set the overall context.

Recognising that the media commit significant investment and have a legitimate part to play during operations, we will wish to work more closely in future to ensure that the requirements of both the media and the military can be met, without compromising either role or the safety of our forces. On 23 June, MOD participated in a seminar at the Royal United Services Institute with journalists, broadcasters and academics to examine the media campaign and consider how things might better operate in the future. There are many challenges ahead, and over the coming months MOD will be working with all parties to ensure that future arrangements take account of the lessons from Iraq.



A Royal marine ashore on the Al Faw peninsular

Maritime Operations

3.13 The Royal Navy's main roles were to: ensure the safe transit of sea-borne men and materiel to theatre, conduct training ahead of operations and undertake surveillance of the potential area of operations. Once in theatre, the physical, operational and tactical situation had to be shaped to our advantage, in order to ensure access for joint forces, project combat and other power ashore, and help sustain and supply both joint and maritime forces. There was no major Iraqi opposition at sea, either from air or surface forces. However, provision had to be made against random mining, suicide boats and surface-to-surface missiles. Nearly 200 mines were seized on two captured tugs, and six Iraqi patrol craft in Umm Qasr. There was also the possibility that Iraq might use aircraft or weapons of mass destruction against the coalition.

3.14 In addition to the successful landing described at para 3.5, UK maritime forces contributed to a broad range of coalition activities. Leading the surface coalition mine-clearance effort, the UK MCM Commander, with four US and six UK MCM vessels, completed the key task of clearing a 200 yard channel through the Khawr Abd Allah waterway to the port of Umm Qasr on the 28 March. This allowed RFA SIR GALAHAD to deliver the first of many aid shipments into Iraq and for the UN Oil-For-Food programme to re-commence. This specialist mine detection and clearance capability, including the Royal Navy divers who cleared ship berths inside the port, were key assets for the coalition. Meanwhile, UK RFA fuel tankers replenished coalition ships at sea, a contribution valued by the US Fleet. The use of recently upgraded Sea King Mark 7 helicopters as reconnaissance platforms in support of land operations also yielded excellent results, while Lynx and Gazelle helicopters supported 40 and 42 Commandos, destroying a number of enemy tanks and Armoured Personnel Carriers. Throughout, US warships and Royal Navy submarines launched Tomahawk cruise missiles at high value targets across Iraq as part of the integrated air campaign.

HMS Ark Royal leaves Portsmouth to lead Britain's maritime taskforce



The Information Campaign

The UK information campaign was designed to influence the will of the Iraqi regime and the attitudes of ordinary Iraqi people in support of overall campaign objectives. It also articulated the Government's strategy to our allies and partners, and others in the region and elsewhere who were either non-aligned or opposed to coalition policy on Iraq. This multi-level approach, in conjunction with the US and other allies, required an integrated, agile campaign based on open reporting and transparency. Most effort was devoted to opinion-forming media, including terrestrial television, the press, satellite and cable bearers, Internet and interactive media and ultimately bulk leaflet drops over Iraq itself.

During the conflict it proved difficult to measure the effectiveness of the information campaign and even now it is not easy to make definitive judgements. However, the largely quiescent reaction of the bulk of the Iraqi population and the disappearance or surrender of most of the Iraqi armed forces may indicate its positive effects in tandem with a military campaign whose overwhelming, rapid success created its own information impact and momentum.

Future efforts in this area will concentrate on streamlining the means of assessing the effects of the information campaign and confirming the truth about events from our commanders in the front-line as quickly as possible.

A soldier observes the front line as the sun goes down just outside Basrah



Military Campaign - First Reflections

Overall, this operation confirmed the vision of the 1998 Strategic Defence Review (SDR) that the UK Armed Forces should evolve an expeditionary-based strategy, providing ready, balanced forces capable of applying decisive effect in scenarios of varying intensity, frequency and character in an uncertain and unpredictable world. The SDR, and last July's SDR "New Chapter" based on analysis of the implications of 11 September 2001 and subsequent operations against terrorism, took into account the growth of asymmetric threat and the need to be able to operate with allies and partners.

The operation confirmed that our war-fighting doctrine, broadly based on the tenets of manoeuvre warfare and decisive effect, was sound, albeit capable of further refinement. Similarly, despite some issues, our readiness posture had permitted a flexible, rapid response, coherent deployment and direct theatre entry into a hostile environment. Our equipment generally coped with the environmental demands and allowed us to maintain sufficient firepower, mobility, protection and technological advantage over the opposition. At the same time, our support infrastructure, although rigorously tested in fast moving combat, and with limited access to host nation support, sustained us in carrying out all assigned tasks.

This was overwhelmingly a US shaped and led operation. The UK contribution was taken into the US plan where it could best complement and enhance US capabilities, both political and military. Most of what UK forces achieved took place under the umbrella of US dominance of every warfare environment. The coalition had naval and space dominance from the start, moved from air and information superiority to dominance and thereby quickly overcame Iraqi opposition on the ground. Coalition forces had technical superiority in virtually every area of combat and could operate through most conditions of visibility and weather and at night. In sum, the coalition dominated the political, diplomatic, military and economic levers. The operation was conducted at a time of its choosing, using unhindered lines of communication, without interference from Iraq at any stage up to the start of hostilities.

Strategic agility and access were defining features of this campaign, ranging from the maintenance of extended sea, surface and air lines of communication and attack to a major re-positioning effort when substantial coalition forces were deployed to the south instead of the north. At the operational and tactical levels, light but high impact forces and air power shaped and exploited the battlespace and achieved specific missions ahead, and sometimes independent of engagement by main forces. Their inherent agility allowed rapid re-tasking, especially of ground forces, through the use of highly mobile armoured capabilities and helicopters enabled by instant communications and directed logistics.

Another critical aspect was coalition forces' steadily increasing confidence in the protection they enjoyed against Iraqi weapons, based on counter-measures in the air, the robustness of protection, and Iraqi tactical and equipment weaknesses. This allowed rapid, bold and aggressive attacks to take place and enabled momentum to be sustained in the face of counter-fire.

Implications for Future Joint Operations

The UK force contribution had to be generated within very tight timelines, using mechanisms and pragmatic solutions that in some cases by-passed established readiness profiles and resourcing assumptions. Given the unpredictable nature of future operations, this may be inevitable, and we need to review how we prepare for operations in such complex politico-military environments.

The overwhelming success of rapid, decisive operations in Iraq reflects the deployment of fast moving light forces, highly mobile armoured capabilities and Close Air Support, which made use of near real-time situational awareness by day and by night. The US ability to combine land and air operations and support them from the sea and from friendly bases at very high tempo enabled the mix and impact of joint assets to be adjusted to operational need or events across the whole theatre of operations. This is likely to shape US doctrinal development and impact on potential partners. The implications of maintaining congruence with an accelerating US technological and doctrinal dominance need to be assessed and taken into account in future policy and planning assumptions.

Experience gained on other expeditionary operations, most recently in Afghanistan, was invaluable in Iraq. Beyond that, twelve years of enforcing the No-Fly Zones had conditioned coalition aircrews to the Iraqi environment. Exercise SAIF SAREEA II which took place in Oman was of particular benefit in rehearsing expeditionary operations in the Gulf area to practise real time land/air co-ordination. This underlines the need to train as realistically as possible.

Maritime Operations

The performance of UK maritime forces in successfully meeting their objectives demonstrated the development of the RN's joint and expeditionary credentials since the SDR. Our forces showed linkage with the US in virtually every maritime warfare discipline, and we expect to draw a number of lessons from the US experience in using large carriers and powerful amphibious groups in both the pre-combat and combat phases of the operation.

The operation confirmed the flexibility of sea-borne forces for manoeuvre and for the application of combat power, theatre entry and power projection, in the form of sea-based aviation, cruise missiles, amphibious forces and Naval Fire Support. It also showed the possibilities of afloat support for sea-based sustainment of joint forces.

Land Operations

In addition to the quality of our people, the reliability, mobility and protection offered by Challenger 2, Warrior and AS90 contributed to the coalition's success on land. The operation confirmed that protection is vital when an enemy (regular or irregular) is using direct or indirect weapon systems. Where the terrain constrained movement, UK combat engineers rapidly delivered significant engineering solutions to cross obstacles. It also highlighted the flexibility of the force package deployed, and the potential for light and heavy forces to operate together in an urban environment. Both 3 Commando Brigade Royal Marines and 16 Air Assault Brigade requested armour assets to boost their combat power.

The framework of UK military doctrine enabled swift and focused effort at all levels, so that planning and execution were deliberate and effective. Orders were clear but allowed considerable scope for initiative at Junior Officer and NCO levels. Recent operations in Bosnia, Kosovo, Sierra Leone and Afghanistan have built a core of experience that enabled our soldiers to switch instinctively from warfighting to peacekeeping duties with comparative ease. This was particularly noticeable after the seizure of Basrah and other southern towns.

Coalition Unmanned Aerial Vehicles, were used extensively to provide real time targeting information to cue air assets and artillery. Armour was consequently able to move quickly through urban areas without forward screening by infantry patrols and easily defeated isolated concentrations of small arms and hand-held anti-tank weapons. Weapon-locating radar enabled accurate targeting of enemy guns and mortars thereby minimising incidental damage.

US experience with its Apache and Cobra helicopters will provide valuable lessons on the role of Attack Helicopters.

Air Operations

The RAF's extensive contribution to the air campaign demonstrated how far it has embraced the new expeditionary culture. It included a coherent array of combat and combat support platforms, and valuable specialist capabilities such as tactical reconnaissance and air refuelling assets. The operation demonstrated the potentially devastating effect of integrated land/air co-ordination. The overall performance and adaptability of UK air assets and personnel reflected our important investment in individual and collective training and the RAF's considerable experience of coalition operations with the US in the Gulf region.

The campaign also showed that coalition aircraft needed to be able to identify and target mobile, camouflaged and underground assets and facilities and to achieve discrimination in urban areas. This requires improvements in data transfer, tactical reconnaissance and high definition imagery systems to deliver shorter sensor to shooter times for time-sensitive and 'find and destroy' missions.

The operation also highlighted that the integration of Close Air Support aircraft requires further refinement and practice. It demonstrated the advantages of multi-role aircraft and long-range, high payload platforms. Unmanned Aerial Vehicles have the potential to play an increasing role in the joint battle, both for surveillance and strike and may offer opportunities against time sensitive targets.

Further investment is required in Expeditionary Campaign Infrastructure, Temporary Deployable Accommodation and personal equipment, which should be designed to support expeditionary air operations.

Targeting

Future targeting work will concentrate on improving precision and reducing the time taken to guide weapons on to targets including weapons fired from the sea and long-range, indirect land systems.

An RAF Chinook flying vehicles ashore from HMS OCEAN



CHAPTER 4 - EQUIPMENT CAPABILITY AND LOGISTICS

Introduction

4.1 The success of operations in Iraq demonstrated the effectiveness and extensive capability of the modern equipment and logistics support available to our Armed Forces. In the air, we had at our disposal a range of sophisticated weapons, as well as reconnaissance and air-to-air refuelling facilities. At sea, our capability included modern Mine Counter-Measure vessels, the assault capabilities of the Amphibious Task Group and submarine-launched cruise missiles. Our land forces comprised both light, highly mobile units as well as more heavily armoured elements, equipped with small arms, mortars, anti-tank weaponry, artillery, and a wide array of armoured and light vehicles including the highly effective Challenger 2, as well as a range of surveillance and target acquisition assets. These front-line forces were supported throughout by an enormous logistic effort.

4.2 Experience from previous operations and exercises had a notable impact on logistics and equipment performance throughout this campaign. For example, after Kosovo, we improved our all-weather bombing capability, which was used to significant effect in this operation. Equally, recent experience in Afghanistan influenced decisions on equipment procurement. Exercise SAIF SAREEA II in 2001 proved especially beneficial by providing a rigorous test in the desert for our equipment and logistics capabilities in expeditionary warfare. In particular, a number of lessons relating to Challenger 2 were successfully implemented.

4.3 Initial reports suggest that our equipment and logistics support performed well overall, although improvements are required in respect of asset tracking and distribution within theatre. Further analysis will continue over the coming months to ensure that we draw the right conclusions. However, some details and preliminary assessments are set out below.

UOR Process

4.4 The Urgent Operational Requirement (UOR) process was described in Chapter 2. For this operation, MOD approved over 190 UORs at a value of around £510M (a small number of additional UORs have since been progressed to support continuing UK operations in Iraq). In some cases, this meant that equipment had to be supplied by industry at extremely short notice, and we will wish in future to ensure that the balance of risk inherent in our readiness profile is accurately assessed and monitored. Some UORs involved accelerating existing programmes such as the procurement of the Temporary Deployable Accommodation and the Head Mounted Night Vision System. Others, in particular the measures to enhance interoperability with coalition allies, were new procurements made in short timescales. Industry responded magnificently to the surge of requirements in the build up to the operation, proving the value of the partnering approach that the MOD has developed over recent years. Although some long lead times presented significant challenges, most UORs that were procured were delivered and fitted before combat operations began. Despite units having had limited time in which to train and become familiar with the new equipment, our initial assessment is that they added valuable capabilities during the operation. The UOR process inevitably involves the risk that not all requirements will be met in time, but it would be inefficient and unaffordable to buy and maintain equipment for every imaginable contingency in every climate. However, we will undertake further analysis to improve our understanding of the likely timescales within which different capabilities could be procured, delivered and fitted, to help inform the process of prioritisation within MOD's Equipment Plan.

4.5 Some UORs were aimed at countering specific threats. Our intelligence indicated that Iraq would try to repeat its tactic from the 1991 Gulf conflict of deploying hundreds of sea mines to deny freedom of manoeuvre to coalition forces in Iraqi and Kuwaiti coastal waters and rivers. The RN's ability to counter this threat, especially in shallow waters, was reinforced by new equipment, developed in conjunction with QinetiQ, in addition to the hiring of acoustic equipment from Australia. These and existing systems were needed to clear the Umm Qasr waterway of Iraqi mines in support of the humanitarian aid mission and to prepare the port for commercial use.

4.6 For the land campaign, we needed to take into account environmental factors such as the dusty, sandy terrain and high temperatures of Iraq. Challenger 2 tanks were modified accordingly, including the fitting of specialist filters and skirting to reduce dust ingestion. These measures were successful, with early reports suggesting that average availability for each major land vehicle was 85-95%, with that of Challenger 2 over 90%. Subject to confirmation, it represents a significant improvement over availability levels achieved in Oman during Exercise SAIF SAREEA II. This was not unexpected, given the inevitable artificialities and limitations inherent in an exercise scenario as distinct from operations. Unfortunately, UOR equipment to provide AS90 self-propelled artillery with an enhanced air-conditioning unit could not be fitted until late in the operational phase. Most units operating in Iraq were supplied with the modified SA80 A2 rifle, which performed extremely well in the hot and dusty conditions. Solutions to difficulties associated with maintaining the rifle which were identified in Afghanistan had been quickly implemented, and the modified rifle rapidly gained the confidence of units in theatre.

Weapons and Munitions

4.7 A guiding principle of the coalition air campaign was to achieve maximum effect with minimum force. The use of precision guided weapons was key to this. The value of cruise missiles had previously been demonstrated in Afghanistan, Kosovo and the 1991 Gulf Conflict. But whereas in the 1990s it took days between identifying a target and attacking it, by this operation the improvements in our systems reduced the time to a matter of hours, enabling time-sensitive as well as fixed locations to be targeted precisely. UK submarines played a key role in Iraq by firing Tomahawk cruise missiles which again offered a particularly useful long-range, stand-off, precision capability, the firing of which was unconstrained by weather and basing issues. This operation also saw the first use of the Storm Shadow stand-off, precision, air-to-ground cruise missile, carried by Tornado GR4 aircraft. Storm Shadow has a range of over 230km and can be deployed by day or night in all weather conditions to destroy a wide variety of high value targets. The missile navigates by digital terrain profile matching and Global Positioning System (GPS) with a terminal seeker to achieve exceptional precision and thus minimise the risk of collateral damage. Early analysis of its performance suggests it will provide a step-change in the RAF's stand-off attack capability.

Storm Shadow being prepared for its first operational use



4.8 Following operations in Kosovo, MOD acted quickly to enhance the RAF's precision attack capability in air-to-ground munitions by procuring anti-armour Maverick missiles and Enhanced Paveway bombs that can hit targets using GPS guidance. The number of Tornado GR4s and Harrier GR7s capable of carrying such weapons was also increased. This built on MOD's existing laser-guided bombing capability provided by Paveway bombs. Around 85% of air launched weapons used by UK forces in Iraq were precision guided, compared to about 25% in Kosovo. This helped achieve the coalition's objectives more quickly, while minimising civilian casualties and the risk to our own personnel. Precision weapons also included inert Paveway II bombs for use against targets in densely populated areas, where the aim was to destroy single targets while leaving neighbouring buildings intact.



Royal Marines of 40
Commando board helicopters
for the night assault on the
Al Faw peninsular

4.9 However, precision weapons were not appropriate in all circumstances. Weapons such as cluster bombs also played an important role against dispersed military targets in the open. RAF aircraft dropped a total of 70 cluster bombs during the operation, mainly in the vicinity of Baghdad against troops and armour in the open. In addition, the UK fired some 2000 artillery-delivered extended range bomblet shells, mostly around Basrah. Without these weapons, disproportionately powerful munitions would be needed to achieve the same effect, increasing the devastation caused.

4.10 UK forces deployed with Depleted Uranium (DU) munitions for their penetrative capability against heavy armour. In total, some 1.9 tonnes of DU were expended by Challenger 2 tanks in Iraq. Although there is no reliable scientific or medical evidence to suggest that DU has previously been responsible for post-conflict incidences of ill-health, all UK personnel who served in Iraq will have access to health monitoring (see para 5.13). Furthermore, strict guidelines were issued prior to operations commencing to minimise the risk to UK personnel who need to work in the vicinity of armoured vehicles that may have been destroyed by DU munitions, and a detailed scientific research programme will be undertaken on Iraqi tanks damaged by DU.

4.11 The UK has a long tradition of providing practical and financial help with munitions clearance, and in Iraq we take very seriously our responsibilities as an occupying power to do all we can to create a safe and secure environment. MOD is currently providing information to non-government clearance organisations about the weapons used at different locations, so that the clearance of all types of unexploded ordnance that might pose a risk to civilians can be achieved quickly and effectively. Post-Kosovo, new procedures have been put in place to expedite the provision of such information. The unprecedented scale of abandoned Iraqi munitions represents an enormous challenge in terms of security and subsequent disposal. Education campaigns are under way using integral information support assets, and local campaigns in schools and colleges in conjunction with UNICEF and the International Committee of the Red Cross to warn locals of the dangers of unexploded ordnance.

Communications and Information Systems

4.12 The UK has a wide range of communications and information systems performing different functions. These were not all compatible with each other or with US systems, which led to interoperability difficulties. As a result, reliable, secure, timely and effective communication between all stakeholders could not be guaranteed.

4.13 The concept of Network Enabled Capability (NEC), introduced in the SDR "New Chapter", involves the integration of sensors, weapons and decision-makers in order to deliver rapid, controlled and precise military effect. Shortening the time between targeting decisions and execution, as described in para 4.7, is a prime example of this. Many new capabilities introduced through the UOR process in this operation were designed to improve the passage and exploitation of information

as first steps in the development of NEC. Interoperability is another important factor: for example, certain UK and US forces were provided with the capability to track each other's locations, thus improving situational awareness at all levels of command. This led to more effective battle management and an increase in operational tempo in all weather conditions.

4.14 It has long been recognised that the Army's main tactical communication system, the ageing Clansman radio, suffers significant limitations. A new system, Bowman, will be introduced into service from 2004. As an interim improvement, Clansman was supplemented by the purchase of items such as lightweight tactical satellite communications systems, ensuring our forces had maximum operational flexibility. In addition, the Bowman Personal Role Radio, trialled in Afghanistan, was available to all combat troops for the first time. This short-range radio is designed to facilitate communications within small infantry teams. The US Marines have subsequently bought some 5000 sets.

Combat Identification

4.15 The ability confidently and quickly to distinguish between friendly and enemy troops is a vital but complex part of modern warfare, not least when operating in a coalition. Combat ID cannot be delivered by a single system or piece of equipment; it involves a combination of techniques, training and procedures (often operation-specific) reinforced by equipment. The UK worked closely with the US to ensure that effective arrangements were in place, although the US did not decide which combat ID equipments they would operate until the end of 2002. A range of new equipment was procured to ensure that our capability was compatible, which primarily focused on equipment to allow recognition of forces from both ground and air and to enhance the situational awareness of UK forces. The latter included some use of the US Blue Force Tracking system, which provides near real time tracking of assets deployed at unit level. By the start of operations, MOD had deployed 1861 vehicle-mounted and 5000 dismounted Combat ID sets. This was sufficient to meet the full requirement, although the scale of the equipment modifications required in theatre meant that some formations were still being fitted as the first units crossed the line of departure. In the air and at sea, extra "Identification Friend or Foe" (IFF) systems were procured to supplement those routinely fitted to all RAF aircraft and RN warships. This system is also used by the US. IFF systems are tested prior to each take-off and monitored during flight. While no country has yet been able to field such a capability for land troops, the UK is actively involved in developing Battlefield Target Identification for ground-to-ground recognition in the future. Bowman will also improve situational awareness and, in turn, Combat ID.

4.16 While our aim is to provide UK forces with as effective a Combat ID system as possible, regrettably no system is 100% failsafe, no matter how sophisticated the technology. Sadly, a number of UK and US Service personnel were killed in so-called "friendly fire" incidents. These are still under investigation, but experience in this and previous campaigns indicate that we cannot relax our efforts or underestimate the importance of training, tactics and procedures in this vital area.

Clothing, Food and Accommodation

4.17 Clothing, food and accommodation all contribute to combat effectiveness. Significant investment has been made in recent years to improve the quality of such equipment, and new Temporary Deployable Accommodation is being sent to theatre to enhance conditions in the more permanent locations now that the security situation has stabilised. A new type of boot better adapted to desert conditions had already been purchased. However, one area we need to look at is the quantities of boots, clothing and other personal equipment we routinely hold. Under SDR planning assumptions there was sufficient personal equipment to equip both the Joint Rapid Reaction Force and the Spearhead Battalion (a total of 9000 personnel) for desert operations. In the case of this operation, the numbers deployed were significantly higher, and whilst most materials were sent out in time, difficulties with in-theatre tracking meant that there were some problems with distribution. These are being investigated (see para 4.23). That said, front-line forces were equipped as a first priority.

4.18 Nuclear, biological and chemical (NBC) protection was particularly important for this operation. While a considerable logistic effort was required to ensure that sufficient NBC equipment and stores were available for deploying forces, routine NBC training had largely ensured a sufficient level of knowledge to enable a realistic, safe standard of protection to be reached. Although a sufficient number of NBC suits were acquired, some difficulties were experienced in ensuring that the correct sizes were available.



An RAF mess tent in the Gulf

4.19 For expeditionary operations, temporary accommodation avoids the unnecessary cost and time of constructing permanent camps. The US, with significant numbers of troops already based in Kuwait, had permanent camps with high quality facilities available. Where appropriate, the UK took advantage of these facilities, and used the US logistics chain during the deployment stages. Most UK troops were accommodated in tented camps contracted through the US, which were already in theatre. We are now commissioning the first 500-man Temporary Deployable Accommodation camps, with more to follow promptly. They are of a very high standard and have been built very quickly. However, there were early problems with the contracts for portaloos, and sourcing problems with refrigerated containers and air conditioning units, which caused some hardship for our soldiers. These shortcomings have been addressed.

4.20 The provision of high quality and satisfying food is fundamental to physical and mental well being and is a key element in maintaining morale. The mainstay of catering for UK troops was the Operational Ration Pack. This provides three full meals per day and a snack, with a variety of menus, and contains substantially more calories than the NATO minimum requirement. Where practical, troops are now provided with meals prepared using fresh provisions. Up to ten litres of bottled drinking water/day was also provided. In total some three million ration packs were issued to theatre, and 745 ISO containers of fresh food and water were delivered.

Logistics

4.21 The enormous logistics effort involved in mounting this campaign was a major contribution to its success. In total, a similar size land force was deployed in less than half the time achieved during the 1991 Gulf conflict - a credit to all those involved.

4.22 The focus for logistic support in theatre was the Joint Force Logistic Component Headquarters, an initiative tested during Exercise SAIF SAREEA II and in Afghanistan. This HQ, based on HQ 102 Logistics Brigade and augmented by staff from all three Services, successfully supported UK force elements in theatre. It ensured a smooth flow of materiel into theatre, with over 15,000 personnel deployed in logistics roles alone, and many more involved in logistics support back in the UK. They dealt with over 190,000 demands placed on the supply system, while the daily air re-supply operation reached a maximum of 254 metric tonnes at its peak. Our four C-17 aircraft and other air transport assets deployed some 50% of the personnel and stores that were required to go by air, again proving their worth as essential, capable and hard-worked assets for rapid and assured deployment. Sea lift benefited from the recent introduction (some 20 months early) of four new Roll On/Roll Off vessels under the Private Finance Initiative. These deployed 15,000 lane metres of equipment (some 11% of the total requirement), including critical port establishment equipment, ahead of the main force. There is nevertheless a need to charter substantial additional air and sea lift to ensure that the UK can deploy large-scale forces rapidly.

4.23 However, the logistic task is not complete once the equipment arrives in theatre. The complex process of distribution throughout the theatre of operations - often over hundreds of miles - then begins. The ability to track accurately the movement of stock, both whilst in transit and in theatre, is key to this process. MOD had identified the requirement for better stock visibility as an important lesson from previous operations. However, finding an affordable solution to meet this requirement has not proved easy. Elements of the US Total Asset Visibility (TAV) system were purchased as a UOR for the operation. Integrating this system into the UK's supply chain and providing sufficient training for operators in the space of three months was a challenging

undertaking. In the time available, only a limited capability was fielded. The system was not available for the early phases of the deployment, and full visibility of stores only reached as far as the entry point into Kuwait. With limited logistics information systems as well, it was therefore difficult to determine in-theatre the rate of consumption of critical spares (and thereby the need for re-provision) or to track down specific equipments. In the light of our experience, we need to examine the requirement for a common, robust tracking system to track equipment and stocks in fast-moving operations. However, the introduction of TAV did represent a substantial leap forward in capability and contributed to the logistic efficiency of later phases of the operation.

Equipment - First Reflections

- Equipment across all three Services matched and often exceeded expectations, reflecting recent operational experience and the value of Exercise SAIF SAREEA II.
- Tomahawk cruise missiles again proved a particularly useful long range, stand-off, precision capability.
- The Shallow Water Mine Sweeping System was used operationally for the first time. It was the only available coalition remote-controlled influence mine sweeping equipment capable of river operations and made a significant contribution to the tempo of the campaign. It enabled access to key port facilities for humanitarian aid distribution and logistic sustainment.
- Challenger 2, Warrior and AS90 all proved to be battle-winning equipment and achieved very high availability levels. Dust mitigation measures for Challenger 2 were effective, and overcame the difficulties reported during Exercise SAIF SAREEA II. The low level of UK casualties is a reflection of the outstanding protection afforded by our armoured vehicles. The SA80 A2 assault rifle also performed well.
- The Air contribution was marked by the increased availability and use of precision guided weapons, including the new Storm Shadow stand-off precision missile, reflecting lessons learnt from recent operations. Some 85% of UK air weapons were precision guided, compared to 25% during Kosovo.
- The increased utility of multi-role platforms was demonstrated by the ability of Tornado GR4 and Harrier GR7 aircraft to undertake both tactical reconnaissance and offensive attack missions, including Close Air Support.

Logistics - First Reflections

- The significant logistics effort involved in deploying forces worked well. Although both the C-17 in the air, and the new Ro-Ro ferries at sea, provided excellent support, both the deployment and the re-supply phases involved recourse to a large quantity of chartered shipping and air assets. We will need to keep under review our air and sea transport assets and our ability to secure access to commercial transport in the quantities and timeframes required to meet future expeditionary requirements.
- The Joint Force Logistic Component itself worked well, but existing practices and procedures will continue to be refined and standardised at lower levels to integrate more closely the requirements of single-Service supply chains.
- The balance of ready stocks and those sourced from industry will need to be kept under review so that the most appropriate balance of risk (business versus operational risk) in stock holdings can be achieved.
- We need a common, robust tracking system to enable equipment and stocks to be tracked throughout the supply chain in fast-moving, complex operations.
- We need to review the provision of Temporary Deployable Accommodation to ensure that accommodation and human support services are made available to our people, particularly in arduous locations.

CHAPTER 5 - PEOPLE

5.1 The Iraq operation showed once again why the UK's Armed Forces are regarded as among the best in the world. The high quality of their training and professional expertise was demonstrated in the skill with which they performed their roles. Above this, good discipline, motivation, resourcefulness and courage were fundamental factors in their success. The tasks required of our Servicemen and women throughout the campaign and in the immediate aftermath of hostilities were numerous and complicated, and their impressive performance in achieving their military objectives so rapidly should not be underestimated.

5.2 Our Armed Forces have unique experience of urban operations - in Northern Ireland and the Balkans in particular - developing valuable skills that have served them well in Iraq. These go beyond combat training and include having to manage sometimes hostile populations at a time of great uncertainty and turmoil. In Basrah, quickly gaining the trust and co-operation of the local people was of critical importance.

Reserves and Civilians

5.3 Some 5000 reservists took part in operations in Iraq in a wide range of roles from infantry and logistics to more specialised roles such as doctors and air traffic controllers. The initial call-out was described in Chapter 2; up to a further 2700 reservists have been called out following the end of decisive combat operations to assist the stabilisation force and help with reconstruction. Some reservists served in formed Reserve units or sub-units, others within regular units. Some were Sponsored Reserves who served on the Roll on/Roll off ships to guarantee the delivery of equipment by sea through the combat zone.

5.4 The Armed Forces were also supported by a large number of UK civilians. Up to 200 MOD civilians were deployed to the Middle East in direct support roles such as political advisers, contracts and finance officers, scientists and operational analysts and firemen. In addition, many civilians were moved from their normal jobs to provide enhanced manning round-the-clock for PJHQ and MOD HQ, while others such as the RFA crews and staff in the Defence Logistics Organisation contributed critically to the support of the front line in their normal jobs. A number of issues were identified regarding current policy for the employment of civilians on operations that will guide future developments in this area.

5.5 Crucial support was also provided by UK contractors who, with the assistance of locally contracted workers, provided a wide range of services behind the front line, such as technical equipment support, interpreting, catering and portering. Whilst civilian contractors have deployed into operational areas before, this was the first time they had a formal MOD policy to protect their interests, which was welcomed by industry. On average 150 civilian contractors were deployed at any one time. There was also a considerable number of locally employed civilian contractors supporting the UK catering and logistic effort.

Health

5.6 The health of all our people was of paramount importance, and they benefited from extensive medical support before, during and after deployment. A number of improvements have been implemented in important health-related areas since the 1991 Gulf Conflict. We have

A Royal Marine from 40 Commando patrols through the streets of Umm Qasr in southern Iraq.



rationalised our immunisation policies, ensuring that immunisations are timely and appropriate, minimising the need for multiple injections on deployment. Personnel were given special briefings on health matters covering stress, personal hygiene and health threats. Guidance was issued on the use of pesticides and handling Depleted Uranium ammunition, and a new operational medical record form was used, ensuring that health events were recorded more systematically than before.

5.7 At the peak of the operation, British forces were supported by front-line medical capabilities embedded within each unit, two Close Support and two General Support Medical Regiments, three Field Hospitals (two fully established, with a third held in reserve in theatre), two Commando Forward Surgical Groups, and the Primary Casualty Receiving Facility in RFA ARGUS, which provided a 100-bed fully equipped hospital. Procedures were in place to move serious casualties (once stabilised) out of theatre to more sophisticated medical facilities, and sometimes back to National Health Service care in the UK. The medical component of the UK deployment was fully manned, with the 2800 medical staff including around 760 medical specialist reserve personnel. Trained psychiatric staff were also deployed. MOD liaised closely with the Department of Health to minimise any impact of this call-up of reserves on the NHS, spreading the load as widely as possible across the country to ensure as far as possible that no area was affected disproportionately.

5.8 Thankfully casualties suffered were relatively light. But more than 4000 British patients were treated in our field hospitals, and over 800 were evacuated back to the UK by air during the deployment and combat phases of the operation (the majority with non-battle injuries). In addition, around 200 Iraqi Prisoners of War and 200 Iraqi civilians were treated in UK medical facilities. UK and US medical teams worked closely together and treated each other's troops in their respective operational areas. The Princess Mary's military hospital in Cyprus was augmented to act as an aeromedical evacuation staging hub for both UK and US casualties, with a small US medical capability embedded within the UK facility.

5.9 Many regular field hospital medical staff have now returned home in order to recuperate, fulfil other commitments and, if required, prepare to deploy back to Iraq this summer. This deployment will then enable the remaining reservists to be relieved and return home for demobilisation.

Bereavement

5.10 Regrettably the Armed Forces suffered a number of fatalities. In the period to 1 May, 33 UK Service personnel had lost their lives in the service of their country. Since then, there have been further fatalities. Our deepest sympathy goes to the families and friends of all who have lost their lives. Welfare support to bereaved families is taken very seriously, with well-established procedures in place which are adapted to the circumstance of each family. This operation saw the introduction of the policy to extend ex-gratia payments to unmarried partners of those who lost their lives. There was one regrettable incident where the next-of-kin was sent a letter containing incorrect financial advice, which caused distress at a very difficult time. MOD is reviewing bereavement procedures to take account of this and other lessons identified, and has already made changes.

5.11 Since the Falklands conflict, it has been usual practice to repatriate the bodies of those killed in action for burial in the UK. We believe that the ceremonial arrangements at RAF Brize Norton proved a fitting mark of respect and, although a new development for this country, very much in tune with the earlier traditions of our Armed Forces. Grants were available to families wishing to have a full military burial.

Operational Welfare Package

5.12 Our operational welfare package is an important means of providing for the emotional and physical well being of deployed Service personnel. Owing to the austere nature of the

deployment and the lack of infrastructure in some locations, the welfare package was implemented in stages. Initially this consisted of Forces Free Air letters (commonly known as 'Blueys') delivered electronically, mail, welfare telephones, newspapers, radio broadcasting, limited Internet access and basic shop facilities. This is now being extended to provide additional Internet access, fitness equipment, TV broadcasting and free books. In conjunction with Royal Mail we also provided a free postal service for packets up to 2kg for family and close friends of personnel serving in the Gulf. This was introduced to supplement 'Blueys' as soon as the operational situation allowed, and was well received – initially doubling the volume of mail dispatched to theatre from 10 tons to around 20 tons daily. Overall, more than 100,000 bags of letters and packets have been despatched to the Gulf since early February. The operational welfare package has also been extended to help home units look after the families of those deployed. The unit receives a sum based on the number of their people deployed, which can be used to improve communications and welfare for families, such as through the improvement of Internet access at unit community centres. This has been very favourably received.



A British Army medic checks the health of an Iraqi child

Post-Operation Health

5.13 Our commitment to the physical and mental health of Servicemen and women does not end when combat operations cease. A programme of de-stressing and recuperation is in place to help reduce the risk of post-traumatic stress. MOD will also be conducting research into the physical and psychological health of those involved in the conflict – whether as Service personnel, supporting civilian staff, voluntary aid workers or journalists. Experts from King's College Hospital, London will conduct interviews and issue questionnaires to gather health data, so that this can be compared with data on personnel who did not deploy. The research will be monitored by an independently chaired board. In addition, regular and reservist Service personnel and deployed MOD civilians can be referred by their doctor to attend the existing medical assessment programme for Gulf veterans. This is run by MOD at St Thomas's Hospital to assess patients and recommend treatment as appropriate. Tests for exposure to Depleted Uranium are also available. It is too soon to know whether health concerns will emerge, but if they do MOD is committed to identifying and investigating them as soon as possible.

Prisoners of War

5.14 The UK has been responsible for 2203 Prisoners of War (POWs) and others captured and detained by UK forces. We worked closely with the International Committee of the Red Cross both in theatre and in Geneva. Guarding responsibilities were split between the coalition partners: the UK took the lead in guarding Iraqis captured by coalition forces in the opening phase of the campaign, until large, equally well-maintained US-run camps had been set up within Iraq. Although the US guard these camps, the UK retain responsibility as Detaining Power for all UK-captured POWs. We are required to treat Prisoners of War in accordance with the Geneva Convention, and to treat unlawful combatants humanely and decently. Some allegations have been made of misconduct by individual UK Service personnel and are currently under formal investigation. The release of our POWs began in early May. By the beginning of July only one POW remained, pending further investigations, together with a small number of recently detained persons.

People And Health Issues – First Reflections

- The success of the operation was only possible through the skill, courage and dedication of our Servicemen and women, who accomplished an extraordinary job of the highest quality. They deployed expecting to operate in a highly hostile and demanding environment, possibly in the face of weapons of mass destruction, but uncertain whether the operation would proceed at all. They were more than equal to the immediate task. Their individual and collective training, both single Service and joint, coupled with recent operational experience and bilateral links to the US, meant that they were quickly able to match US aspirations and integrate with their forces.

- The quality of our reservists was proven beyond doubt, and we believe on first analysis that the right number were called out. Their employment was in accordance with the SDR rationale for a useful and useable force, relevant to modern conflict and capable of integration with regular forces.
- Reservists fill many specialist and key niche capabilities (such as medical services and psychological operations). Capability gaps (which only the Reserves could man) were only filled after mobilisation was authorised and pre-deployment training was complete. We will need to examine the balance between regular and Reserve forces, particularly for such key roles and for the roulement of personnel for enduring operations.
- The mobilisation from the Territorial Army (TA) of large numbers of individual reinforcements, rather than formed units, runs counter to TA ethos and unit cohesion. We need to identify how the reservists' chain of command can be more dynamically utilised, and to examine ways of creating linkages with regular units in order to exploit specialist skills more efficiently. We will want to explore ways of providing a sustainable managed path for those reservists who undertake frequent operational tours.
- There were some organisational issues we will need to consider relating to reservist pay, call-out experiences (see Chapter 2) and the provision of active support to families of deployed reservists. A review of reservist pay procedures should eliminate inefficiencies and take into account the financial and career implications likely to be experienced by reservists as a result of mobilisation.
- There was a need to augment headquarters and formations within the UK and abroad. The diversion of some 1200 personnel to operational tasks led to a number of pinchpoints in some specialist areas.
- Industry and civilian support to the operation was of great value. Deployed contractors played an important role and the value of MOD's partnering approach was acknowledged. However, contractual support could not always be guaranteed, and pragmatic administrative arrangements, robust insurance, adequate pre-deployment training, and balanced threat assessments for contractors are important considerations.
- UK personnel benefited from extensive medical support. Facilities were well equipped for all eventualities, and plans for dealing with serious casualties proved robust. The scale of effort was only possible by the use of almost all medical Volunteer Reserves, most of whom worked in the NHS. We will need to examine in further detail the future provision of medical cover for operations of this size and its impact on the NHS.
- Casualty reporting is a very sensitive area which was generally handled well, not least by the Service visiting officers, in difficult circumstances. One regrettable error was made, and in future all letters sent to bereaved families will be subject to additional scrutiny. Bereaved families will be able to stay in Service accommodation for as long as they feel they need to in order to assess their longer term housing requirements. A tri-Service review of bereavement policy is in hand to determine whether further changes are appropriate.
- Provision of adequate welfare support and the maintenance of morale are essential to the maintenance of operational capability. The operational welfare package is judged to have worked well. But we will need to ensure that Service personnel continue to have access to reasonable life and accident insurance while on operations.
- The handling of Prisoners of War appeared to run smoothly; they have been detained in well-managed camps and generally well treated, although there are ongoing investigations into alleged instances of mistreatment.
- Demands on the Armed Forces have been very high in recent years. At the peak of operations in Iraq, some 62% of the Army was committed to operations. This was manageable, but we must always be aware of the pressures such demands place on our Servicemen and women and their families.

CHAPTER 6 - PROCESSES

Coalition Planning

6.1 In the months preceding the operation in Iraq, our diplomatic efforts were concentrated in the UN process. As the prospect of military action grew more likely, there were increasing contacts with coalition partners and other nations willing to offer assistance to a military campaign. As the planned role and geographical disposition of UK forces became clear, British Embassy staff and officials in the Foreign & Commonwealth Office (FCO) and MOD intensified contacts with regional states to secure basing for them.

6.2 The overall military campaign was US-led, as was the planning process. Although the UK did not make final decisions on the composition and deployment of its force packages until early 2003, we were able to work closely with the US and influence the campaign from initial planning to execution through high-level political contacts and regular dialogue at official level, as well as by the presence of a significant number of embedded UK officers in key US headquarters.

6.3 The coalition recognised the strategic importance of the post-conflict phase. Planning for this began as it became clear that Saddam Hussein was unlikely to comply with the key UN Security Council Resolutions. The Office of Reconstruction and Humanitarian Affairs (ORHA) was established by the Pentagon to provide the transitional civilian authority for post-conflict Iraq, under coalition military control, with the ultimate objective of restoring full governmental responsibility to the Iraqi people. ORHA deployed into Baghdad in mid-April, as soon as coalition control was judged to be in place. In early June, ORHA was subsumed into the Coalition Provisional Authority (CPA) under Ambassador Paul Bremer, bringing together the political and reconstruction strands of coalition post-conflict work.

UK Decision-Making

6.4 Political direction was provided at the highest level by the Cabinet, which discussed Iraq regularly in the months leading up to, and during, the operation. On most days from mid-March to the end of the campaign phase, there were also ad hoc Ministerial meetings attended by the Secretary of State and by the then Chief of the Defence Staff (CDS), Admiral Sir Michael Boyce, as the principal military adviser to the Government. The Secretary of State and CDS also briefed the Prime Minister on a regular basis during the campaign.

6.5 At official level, a well-established process of inter-departmental consultation, led by the Cabinet Office, was put into place for the duration of the operation. This facilitated contacts across Government, including with domestic Departments, and worked well.

6.6 Within MOD, the Defence Secretary normally met twice daily with CDS and others in the direct chain of command for the operation. The Permanent Secretary advised regularly on policy issues. The Chiefs of Staff also met most days, including with officials from other relevant Departments and agencies, to assist the Chief of the Defence Staff.

6.7 As it became clear that military action was likely to prove necessary to enforce UN Security Council Resolutions, UK planning for the post-conflict phase was centralised in the Iraq Planning Unit (IPU), based in the FCO. The IPU was led by a senior FCO official and worked



closely with the Government's central co-ordinating machinery in the Cabinet Office. It included MOD military and civilian staff as well as officials from FCO, the Department for International Development and the Treasury; and quickly became established as an integral element of the Whitehall process. The IPU played a critical role in supporting Ministers, CDS and the Chiefs of Staff in preparations for the post-conflict phase.

6.8 Legal advice was available to political and military decision-makers at all levels during the campaign. The Attorney-General attended ad hoc Ministerial meetings; MOD legal advisers attended the briefing meetings held by the Defence Secretary and the Chiefs of Staff; there was legal support to the Permanent Joint Headquarters from its embedded legal cell; and deployed Service lawyers were available to advise commanders in theatre.

Command Arrangements

6.9 Drawing on experience from previous operations, planning and oversight of the operation was led by MOD and PJHQ, which jointly form the Defence Crisis Management Organisation. CDS appointed the Chief of Joint Operations at PJHQ, Lieutenant General John Reith, as the Joint Commander. He delegated command authority through the 3-star National Contingent Commander in theatre, Air Marshal Brian Burridge, to the UK 2-star Contingent Commanders, who conducted operations as part of a coalition effort under US 3-star tactical control. This command and control structure facilitated the integration of UK forces into the overall US structure, while allowing the UK to reserve national direction of our forces, ensuring that they would only undertake specific missions and tasks approved by UK commanders.

The UK Base

6.10 The UK was engaged in limited (rather than total) conflict with the Iraqi regime and there was no tangible Iraqi military threat to the UK. However, it has been apparent since 11 September 2001 that the UK itself could be a target for specific hostile attack or disruptive action by terrorists, especially when it is engaged in operations abroad. In this respect, it was essential that key enablers and infrastructure should remain free to sustain the campaign, particularly the Military Port at Marchwood and operational air bases such as RAF Fairford. This aspect is likely to remain a key consideration for future operations. Indeed, risk assessments and additional measures to protect military infrastructure are currently under way, including consideration of how best to co-ordinate responses through a more unified decision-making and implementation structure.

6.11 It is significant in this respect that up to 19,000 other personnel were available and trained for Operation FRESCO (the response to the firemen's dispute) at the time in addition to the commitments in Iraq, Northern Ireland and elsewhere.

A sniper with Support Company attached to Number 1 Company 1st Battalion Irish Guards. In a dawn raid on a university / factory complex on the outskirts of Basrah, the Irish Guards attacked and cleared the complex after coming under fire

CHAPTER 7 – AFTER THE CONFLICT

7.1 The UK's "Vision for Iraq and the Iraqi People", launched at the Azores Summit on 17 March 2003, outlined a future for Iraq as a stable, united and law-abiding state within its present borders, co-operating with the international community, no longer posing a threat to its neighbours or to international security, abiding by all its international obligations and providing effective and representative government for its own people. Coalition planning for post-conflict operations, then already well underway, was designed to help Iraq transform to meet these aspirations. For planning purposes, this phase was divided into three stages with the following broad aims:

STABILITY: To create a sufficiently stable environment to allow transition to follow-on forces and the engagement of civil agencies to begin recovery.

RECOVERY: To develop a secure and stable environment that supports the process of national recovery in order to begin the transition to Iraqi self-government.

TRANSITION: To complete the transition from coalition control to an enduring, peaceful, self-governing Iraq.

7.2 We always recognised that, in practice, the transition from one stage to the next would not necessarily be clear-cut, and that UK forces in southern Iraq would probably have to begin stabilisation operations while fighting continued elsewhere. It was imperative to ensure that our pre-conflict preparations, both across Whitehall and with the US, were as coherent as possible.

7.3 The most important tasks facing UK forces have been to ensure that the humanitarian needs of the Iraqi people are met, in accordance with our obligations under the Hague and Geneva conventions, and to provide a safe and secure environment.

Humanitarian Assistance

7.4 The Government assumed that UN agencies and Non-Governmental Organisations (NGOs) would be unlikely to deploy resources into Iraq for some time after decisive combat operations had ended. It therefore arranged, in conjunction with the US, for UK forces to provide emergency humanitarian aid in southern Iraq until such time as civilian aid agencies could take over. In the event, the humanitarian disaster that many had predicted failed to materialise, largely due to the coalition's extremely effective targeting policy, which left most of Iraq's civilian infrastructure undamaged, although much of it was suffering from years of neglect. Our forces acted quickly to provide relief where it was needed, and food, water, fuel, medicines and other essentials were soon available in towns throughout the UK's area of operations. 1 (UK) Division was greatly helped in this work by the secondment of two specialists from the Department for International Development (DFID).

7.5 Our intention has always been to hand over responsibility for humanitarian assistance to civilian aid agency experts (several of whom have received substantial funding through DFID) as soon as possible. As the security situation in the UK's area of operations has improved, we have begun this process (for example responsibility for water distribution has been transferred to UNICEF). Nevertheless, UK forces have made a number of valuable contributions to the humanitarian effort:

- Our forces played a vital role in liberating the port of Umm Qasr. The port was then opened on 28 March, following intensive mine clearing operations by Royal Navy Mine Counter-Measures Vessels and the Fleet Diving Group, who are acknowledged as the world leaders in this field.
- RFA SIR GALAHAD brought the first shipment of humanitarian aid into Umm Qasr, some 300 tonnes of relief supplies, on 28 March. RFA SIR PERCIVALE followed with a similar cargo on 7 April.
- The Umm Qasr – Baghdad railway is now open following repair work by the Royal Engineers. The line will allow the onward distribution of the UN Oil For Food programme supplies from Umm Qasr.
- On 28 April, UK forces delivered 30 World Health Organisation health kits provided by DFID to the Central Drugs Supply Depot in Basrah: sufficient drugs and medical equipment to provide primary care for 300,000 people for 3 months.
- The Royal Engineers, working with NGOs and the Iraqis, have played a vital role in restoring power and water supplies, which had been deliberately degraded by the former regime. In many areas, those supplies are now better than before the conflict. The Royal Engineers constructed a water pipeline from Kuwait to Umm Qasr, able to deliver up to 2 million litres of drinking water daily. 80% of Basrah now has access to running water - more than before the conflict - and 75% of the city is connected to a sewerage system. UK forces are also working with NGOs to replenish water treatment chemicals.
- Non-political interim advisory councils have been set up in most urban centres in the UK area of operations, with an overarching provincial council now up and running in Basrah province. These councils are designed to address practical local issues until new constitutional arrangements are agreed.

Iraqi children welcome
British troops



Security

7.6 Although the regime's power has been swept away, pockets of resistance remain in some areas, and stabilisation operations continue throughout the country. Several cities suffered from looting immediately following the removal of the regime, especially Baghdad. Initially, calls for coalition forces to do more to protect Iraqi civilians, keep order and prevent looting had to be weighed against the demands of continuing operations to overcome resistance by Iraqi forces, both regular and irregular. It was, however, also important for Iraq to be seen to police itself as soon as possible rather than rely on coalition forces.

7.7 UK forces quickly began to work with senior police figures in Basrah to encourage the Iraqi police back to work. Joint UK/Iraqi police patrols commenced on 13 April, and there are now around 2000 Iraqi police back at work in the city. Similar initiatives took place in towns across the UK area of operations, with the result that Basrah and Maysan provinces were declared permissive by the Humanitarian Operations Centre. As a result, many NGOs and UN agencies, including the World Food Programme and the World Health Organisation, are now permanently located in Basrah.

7.8 Around Baghdad and in the north of the country, US forces have encountered resistance from small bands of irregular forces loyal to the Ba'ath party, and those whose interests lie in creating instability and economic poverty. The US have launched a number of operations targeted at these subversive elements posing a threat to stability in Iraq. These operations have successfully secured large caches of weapons systems and ammunition, and seized some \$10 million in cash and precious metals. More than 1700 hostile irregular forces have been detained.

7.9 While the southern sector has been calmer, the tragic incidents in the town of Al Majar Al Kabir have underlined the continuing risk of localised violence. UK forces will continue to work as their highest priority to improve security and provide the Iraqi people with a solid base on which to rebuild their country.

Reconstruction

7.10 The Coalition Provisional Authority currently has the lead on reconstruction in Iraq. UK civilian and military personnel have played an integral role in ORHA and the CPA from the start. By mid June the number of UK personnel in CPA offices in Baghdad, Basrah and northern Iraq had risen to over 70, including secondees from MOD, FCO, DFID and the Treasury and experts in policing, customs, finance, law, health and education.

7.11 UN Security Council Resolution 1483 of 22 May established a vital role for the UN in the reconstruction of Iraq. It affirmed Iraq's territorial integrity, provided for rapid delivery of humanitarian relief, set a timetable for winding down the Oil for Food Programme, lifted sanctions and endorsed an appropriate post-conflict administration for Iraq. It also provides UN cover for any state wishing to contribute troops to the stabilisation force which the coalition is assembling in Iraq. The new Resolution demonstrates the continuing commitment of Security Council members to the future of Iraq and its people and gives the UN the vital role the Government has always envisaged.



A coalition security patrol with an Iraqi policeman in Al Qurnah

Weapons of Mass Destruction

7. 12 A key component of the search for weapons of mass destruction (WMD) in Iraq is the Iraq Survey Group (ISG), a joint US/UK/Australian operation comprising about 1400 personnel. In addition to the British second-in-command, the UK has made a significant contribution to the Group, consisting of both military units and analytical expertise. The ISG's priority is the discovery and elimination of WMD; however, the Group also collects and exploits information relating to terrorism, war crimes, Prisoners of War and material relating to other suspect activity by the regime. The Group is able to draw on personnel from a wide range of civilian and military organisations, and British support has come from both in theatre and the UK. ISG capabilities include debriefing and interrogation of human sources and analysis of recovered documents, computer media and battlefield equipment.

7. 13 Building on the knowledge we had of Iraqi programmes prior to the war, the exploitation of physical material recovered in theatre, and the interviewing of Iraqi scientists, technicians and other personnel, the Iraq Survey Group is working hard to identify and exploit all possible intelligence leads relating to WMD. A key objective is to increase our understanding of how the WMD programmes operated. The more we understand about the nature of these programmes and the full extent of the methods used by the Iraqi regime to conceal this activity from the world, the easier it will be to eliminate all remnants of WMD infrastructure and materials in Iraq.

7. 14 The UK will continue to provide all support possible to the search for, and destruction of, Iraqi WMD. The task of gathering and collating evidence from all sources is expected to be a long and complex task.

Costs of the Operation

Under longstanding Government arrangements, operational expenditure is met from the Reserve on the basis of net additional costs (in other words, excluding costs that would have been incurred anyway, such as Service salaries). This was the first major operation to be costed under full Resource Accounting and Budgeting principles, which created some additional challenges for finance staff.

Early in the operational planning process the requirement was identified for additional expenditure in a range of areas: urgent equipment enhancements, increases in some logistic stock levels, pre-deployment training, and the charter of strategic air and sea lift. (The UOR process is described in Chapters 2 and 4.)

There has been close consultation between the MOD and the Treasury on the resource requirements of the operation from the outset. The Chancellor announced in his pre-Budget Report to Parliament in November 2002 a '£1 billion special reserve in 2002-03 to ensure that resources are available to meet overseas and defence needs in the fight against global terrorism'. In March 2003 the Chancellor increased this figure to £3 billion, to take account of the military campaign and the need for immediate humanitarian assistance to the Iraqi people.

Our latest estimates suggest that the costs of equipping and deploying our forces to the Gulf up to the point of starting active operations will be around £700M. The costs of the actual conflict are more difficult to quantify, since these will have to take account of the large quantity of equipment and stores deployed to, and now being returned from, the Gulf. Both equipment and stocks will require inspection and varying degrees of maintenance after their exposure to heat, dust, and movement around the battlefield; some stocks may be damaged and need to be written off. It will therefore take some time to assess accurately the costs of stock consumption, and of damage and losses to equipment, as well as the cost of force recuperation.

MOD was allocated £30M for immediate humanitarian aid to meet our national obligations in the interim period before the security situation stabilised enough to allow civilian agencies to take on humanitarian responsibilities. It is however too early to estimate post-conflict costs at this stage.

War Crimes

7.15 The UK is determined that those suspected of war crimes, including serious breaches of the Geneva Conventions, the laws and customs of war, and crimes against humanity should be held responsible for their actions and brought to justice. UK forces will do all they can to assist in this.

Force Level Adjustments

7.16 The UK's military contribution to operations in Iraq has now been adapted to the demands of the post-conflict reconstruction phase, so we do not keep personnel in theatre any longer than necessary. The majority of UK forces have already returned from the Gulf, leaving some 14,000 UK Service personnel deployed. A roulement process is in hand, which will be completed over the summer. 3 Commando Brigade Royal Marines and 16 Air Assault Brigade (except 1st Battalion The Parachute Regiment) have both now been withdrawn. 11 ships and submarines, 11 RFA vessels, and the specialist commercially chartered shipping have returned to the UK; the MCM force is on its passage home. These adjustments will be followed by the replacement of HQ 1 (UK) Armoured Division with HQ 3 (UK) Division, supported by 19 Mechanised Brigade, which we expect to complete by mid-July. Around 90 fixed-wing aircraft and 80 helicopters have returned home, leaving 8 Tornado GR4s in theatre with a number of supporting aircraft, and a balanced rotary-wing force of 18 helicopters comprising Chinook, Sea King, Lynx and Gazelle helicopters. Two frigates, a submarine and two RFA vessels remain on operations. This drawdown of forces reflects the change from combat operations to those focussed upon stabilisation and increased security. The requirement for a continued UK presence in Iraq in support of the Iraqi people is dependent upon a number of factors, including progress made against our military campaign objectives, and potential multinational contributions to stabilisation operations in Iraq. On this latter point, positive discussions continue with a number of nations. We have so far received commitments from nine countries representing a total multinational contribution to the UK area of operations of around 5500 military personnel.



British troops of 187 Squadron, 23 Pioneer Regiment, hand out food and fresh water to the local population in a village just south of Basrah

Humanitarian Aid – First Reflections

- The speed and success of the military operation meant that the humanitarian crisis predicted by many in the media and NGO community never materialised. Where food, water, fuel and other essentials were required in our area, UK forces were generally able to distribute supplies, and they did so in a manner that won praise from many NGOs. The Royal Engineers' building of a water pipeline from Kuwait to Umm Qasr was vital in maintaining water supplies in southern Iraq. The arrival of RFA SIR GALAHAD into Umm Qasr on 28 March was almost as important symbolically as it was for the 300 tonnes of humanitarian supplies she carried.
- The success of the humanitarian operation should at least partly be attributed to the extensive planning and pre-positioning of supplies that took place before the conflict began, including the secondment of Department for International Development advisers to HQ 1(UK) Armoured Division in theatre. Credit must also go to the rigorous targeting process and the use of precision guided weapons, which avoided attacks where possible on the essential civilian infrastructure in southern Iraq.
- In terms of planning for the post-conflict phase, we must learn from the difficulties faced in the provision of security in the UK area of operations. Our forces have done sterling work in reconstituting the Iraqi police and judiciary, and did as much as was reasonably possible to prevent looting. However, the unexpected speed, extent and consequences of the collapse of Saddam's security infrastructure has posed challenges for the introduction of new law and order arrangements as rapidly or effectively as we would have wished.

ANNEX A

IRAQ: MILITARY CAMPAIGN OBJECTIVES

1. Our policy objectives were set out in Parliament on 7 January 2003. The prime objective remains to rid Iraq of its weapons of mass destruction and their associated programmes and means of delivery, including prohibited ballistic missiles, as set out in relevant United Nations Security Council Resolutions (UNSCRs).

2. In UNSCR 1441, the Security Council decided that Iraq was in material breach of its obligations under UNSCR 687 and other relevant resolutions. The Council gave Iraq a final opportunity to comply by co-operating with the enhanced inspection regime established by UNSCR 1441, but warned of the serious consequences of failing to do so. The evidence shows that Iraq has failed to comply with the terms of UNSCR 1441 and is now in further material breach of its obligations. In these circumstances, UNSCR 678 authorises the use of force to enforce Iraq's compliance with its disarmament obligations.

3. The obstacle to Iraq's compliance with its disarmament obligations under relevant UNSCRs is the current Iraqi regime, supported by the security forces under its control. The British Government has therefore concluded that military action is necessary to enforce Iraqi compliance and that it is therefore necessary that the current Iraqi regime be removed from power. All military action must be limited to what is necessary to achieve that end. The UK is contributing maritime, land and air forces as part of a US-led coalition.

4. The UK's overall objective for the military campaign is to create the conditions in which Iraq disarms in accordance with its obligations under UNSCRs and remains so disarmed in the long term. Tasks which flow from this objective are set out below.

5. In aiming to achieve this objective as swiftly as possible, every effort will be made to minimise civilian casualties and damage to essential economic infrastructure, and to minimise and address adverse humanitarian consequences. The main tasks of the coalition are to:

- a. overcome the resistance of Iraqi security forces;
- b. deny the Iraqi regime the use of weapons of mass destruction now and in the future;
- c. remove the Iraqi regime, given its clear and unyielding refusal to comply with the UN Security Council's demands;
- d. identify and secure the sites where weapons of mass destruction and their means of delivery are located;
- e. secure essential economic infrastructure, including for utilities and transport, from sabotage and wilful destruction by Iraq; and
- f. deter wider conflict both inside Iraq and in the region.

Military action will be conducted in conformity with international law, including the UN Charter and international humanitarian law.

6. Our wider political objectives in support of the military campaign are to:
 - a. demonstrate to the Iraqi people that our quarrel is not with them and that their security and well-being is our concern;
 - b. work with the United Nations to lift sanctions affecting the supply of humanitarian and reconstruction goods, and to enable Iraq's own resources, including oil, to be available to meet the needs of the Iraqi people;
 - c. sustain the widest possible international and regional coalition in support of military action;
 - d. preserve wider regional security, including by maintaining the territorial integrity of Iraq and mitigating the humanitarian and other consequences of conflict for Iraq's neighbours;
 - e. help create conditions for a future, stable and law-abiding government of Iraq; and
 - f. further our policy of eliminating terrorism as a force in international affairs.
7. In the wake of hostilities, the immediate military priorities for the coalition are to:
 - a. provide for the security of friendly forces;
 - b. contribute to the creation of a secure environment so that normal life can be restored;
 - c. work in support of humanitarian organisations to mitigate the consequences of hostilities and, in the absence of such civilian humanitarian capacity, provide relief where it is needed;
 - d. work with UNMOVIC/IAEA to rid Iraq of its weapons of mass destruction and their means of delivery;
 - e. facilitate remedial action where environmental damage has occurred;
 - f. enable the reconstruction and recommissioning of essential infrastructure for the political and economic development of Iraq, and the immediate benefit of the Iraqi people; and
 - g. lay plans for the reform of Iraq's security forces.

Wherever possible, these tasks will be carried out in co-operation with the United Nations.

8. British military forces will withdraw as soon as practicable. We hope to see the early establishment of a transitional civilian administration. We will work with the international community to build the widest possible international and regional support for the reconstruction of Iraq and the move to representative government.

9. It remains our wish to see Iraq become a stable, united and law abiding state, within its present borders, co-operating with the international community, no longer posing a threat to its neighbours or to international security, abiding by all its international obligations and providing effective representative government for its own people.

March 2003

ANNEX B

CHRONOLOGY

Background

- 1990** | **6 Aug** Following invasion of Kuwait, UN Security Council Resolution (UNSCR) 661 imposes sanctions on Iraq, subsequently extended by further resolutions **29 Nov** UNSCR 678 authorises a coalition to use “all necessary means” to end the Iraqi occupation of Kuwait
- 1991** | **16 Jan-28 Feb** Iraqi forces ejected from Kuwait by coalition forces in first Gulf conflict **6 Apr** Iraq accepts the cease-fire conditions in UNSCR 687, including a requirement to end all prohibited weapons programmes and to allow monitoring by the UN Special Commission inspection team (UNSCOM) **15 May** First on-site inspections begin
- 1992** | **10 Aug** UN “safe haven” is established in Northern Iraq for the protection of the Kurdish population **26 Aug** A no-fly zone is established over southern Iraq for the protection of the Shia Muslim population
- 1995** | **14 Apr** Creation of Oil for Food Programme by UNSCR 986, allowing revenue from oil sales supervised by the UN to be used for the purchase of humanitarian goods
- 1998** | **16 Dec** UNSCOM inspectors leave Iraq due to concern for safety of personnel and lack of Iraqi co-operation **16-19 Dec** Operation Desert Fox: airstrikes against Iraqi weapons facilities
- 1999** | **17 Dec** UNMOVIC created as successor to UNSCOM. Iraq continues to prevent access by inspectors
- 2002** | **12 Sep** President Bush addresses the UN General Assembly, saying Saddam Hussein has systematically and continually violated 16 UNSCRs over the past decade, and calls upon the UN to disarm Iraq of its weapons of mass destruction **24 Sep** British Government publishes comprehensive dossier on Iraq’s weapons of mass destruction. Prime Minister opens Parliamentary debate and acknowledges planning needs to take place **8 Nov** UN Security Council unanimously adopts UNSCR 1441, declaring Iraq to be in material breach of past UNSCRs, creating a tougher UN weapons inspection regime and offering Baghdad a last chance to comply fully, immediately and unconditionally with its disarmament obligations, with “serious consequences” to follow if it did not do so **13 Nov** Iraq indicates willingness to accept the return of weapons inspectors to the country under the terms of UNSCR 1441 **18 Nov** US approaches a number of countries, seeking support in the event that military action proves necessary **25 Nov** House of Commons debate UNSCR 1441. Secretary of State for Defence announces that contingency planning is taking place for possible operations in Iraq **27 Nov** Inspections resume in Iraq **7 Dec** Iraq submits a 12,000 page declaration of its WMD programme to UN **18 Dec** Secretary of State for Defence announces further contingency preparations, including approaching the shipping market to charter vessels **19 Dec** Hans Blix’s initial UNMOVIC report to the UN states that the Iraqi declaration falls some way short of what is required and may constitute a material breach. He subsequently says that the report contained no new information on the weapons programmes revealed by UNSCOM
- Jan 2003** | **7 Jan** Secretary of State for Defence announces the making of a call-out Order and intent to call out 1500 reservists. Augmentation of the Naval Task Group 2003 with 3 Commando Brigade is announced **16 Jan** UNMOVIC discovers chemical weapon warheads in a relatively new bunker in Iraq **20 Jan** Composition of the land package announced **27 Jan** Drs Blix and El Baradei present a report on progress to UN Security Council, making clear the serious shortcomings in Iraq’s cooperation with weapons inspections **30 Jan** Secretary of State for Defence announces further call out of reservists to overall total of up to 6000

Feb 2003

6 Feb Secretary of State for Defence announces the composition of the air package to be sent to the Gulf. Colin Powell briefs the UN Security Council on Iraq's failure to comply with UNSCR 1441
14 Feb Drs Blix and El Baradei present a further report on progress to UN Security Council
27 Feb UK, US and Spain table a draft resolution at UN Security Council making clear that Iraq had failed under its obligations of UNSCR1441

Mar 2003

7 Mar Further inspectors report to UN
14 Mar France declares its intent to veto the draft resolution
17 Mar Following the Azores Summit, the Foreign Secretary announces the abandonment of the UN process
18 Mar President Bush issues an ultimatum for Saddam Hussein and sons to leave Iraq within 48 hours or be removed by force. House of Commons debate to authorise military action against Iraq: motion is passed by 412 votes to 149. Formal decision to commit UK forces following debate. UNMOVIC/IAEA inspectors leave Iraq

Operations in Iraq

20 Mar Limited air strikes are launched on targets associated with the regime in Iraq. Ground campaign begins in the late evening with coalition forces including 40 and 42 Commando RM taking control of the Al Faw peninsula and US forces securing the Rumaylah oilfields
21 Mar Major air campaign begins at 1800
22 Mar US forces reach An Nasiriyah and secure several bridges over the Euphrates
23 Mar Royal Navy vessels begin sweeping the Khawr Abd Allah waterway for mines, to enable the port of Umm Qasr to be opened to shipping
24 Mar Basrah International airport under UK control
25 Mar 40 Cdo engage Iraqi armoured brigade on Al Faw and destroy many Iraqi armoured vehicles
26 Mar Coalition forces target and destroy Ba'ath Party HQ in Basrah
27 Mar UK forces engage and destroy armoured vehicle convoy leaving Basrah
28 Mar RFA Sir GALAHAD arrives in Umm Qasr with humanitarian aid
30 Mar UK forces engage with enemy south of Basrah taking some high ranking POWs
31 Mar A school reopens in Rumaylah, and markets and hospitals open in Az Zubayr

Apr 2003

1 Apr UK forces begin patrolling in Az Zubayr in berets
2 Apr US forces begin land engagement with Republican Guards around Baghdad
4 Apr Baghdad International airport seized by US forces
5 Apr US forces enter central Baghdad for the first time
6 Apr UK troops enter and remain in Basrah encountering little opposition
7 Apr Targeted bombing raid on building containing senior Iraqi leaders in Baghdad
9 Apr Iraqi civilians tear down statue of Saddam Hussein in central Baghdad with the aid of US marines
10 Apr Kirkuk falls to Kurdish forces
11 Apr Commanders in Mosul sign a cease fire
13 Apr Joint UK/Iraqi patrols begin in Basrah
14 Apr US forces enter Tikrit
15 Apr First conference on future of Iraq held in An Nasiriyah
22 Apr UK area of operations declared "permissive" by UN for humanitarian operations to commence

May 2003

1 May President Bush declares major combat phase of operations over



A Chinook helicopter with a Land Rover under-slung flies over the 1st Battalion The Royal Irish Regiment's camp

ANNEX C

OPERATIONS IN IRAQ - DEPLOYED FORCES

19 March - 15 April

Royal Navy

Vessel	Type / Class	Deployment dates	Aircraft / Other notes
Carrier Task Group			
HMS ARK ROYAL	Aircraft carrier	11 Jan – 17 May	with 4 Sea King Mk 7 (849 NAS), 5 Chinook (18 Sqn RAF)
HMS OCEAN	Helicopter carrier	17 Jan – 28 May	with 10 Sea King Mk 4 (845 NAS), 6 Lynx AH7, 6 Gazelle AH1 (847 NAS)
HMS CHATHAM	Type 22 frigate	30 Jan –	with 2 Lynx (815 NAS)
HMS MARLBOROUGH	Type 23 frigate	17 Jan – 20 Apr	with 1 Lynx (815 NAS)
HMS RICHMOND	Type 23 frigate	10 Feb –	with 1 Lynx (815 NAS)
HMS EDINBURGH	Type 42 destroyer	17 Jan – 28 May	with 1 Lynx (815 NAS)
HMS LIVERPOOL	Type 42 destroyer	17 Jan – 20 Apr	with 1 Lynx (815 NAS)
HMS YORK	Type 42 destroyer	17 Jan – 17 May	with 1 Lynx (815 NAS)
RFA SIR GALAHAD	Landing ship logistic	15 Jan –	
RFA SIR PERCIVALE	Landing ship logistic	15 Jan – 28 May	
RFA SIR TRISTRAM	Landing ship logistic	15 Jan – 4 Aug	
Submarines			
HMS SPLENDID	Swiftsure class nuclear-powered attack submarine	9 Jan –	
HMS TURBULENT	Trafalgar class nuclear-powered attack submarine	20 Jun 02 – 16 Apr	
Maritime Counter Measures Group			
RFA SIR BEDIVERE	Mine countermeasures (MCM) support ship	26 Nov – 28 May	
HMS BANGOR	Sandown class MCM vessel	26 Nov – 20 Jun	
HMS BLYTH	Sandown class MCM vessel	26 Nov – 22 May	
HMS BROCKLESBY	Hunt class MCM vessel	26 Nov – 22 May	
HMS SANDOWN	Sandown class MCM vessel	26 Nov – 20 Jun	
HMS GRIMSBY	Sandown class MCM vessel	20 Jan – 4 Aug	
HMS LEDBURY	Hunt class MCM vessel	20 Jan – 4 Aug	
HMS RAMSEY	Sandown class MCM vessel	15 Mar – 4 Aug	
HMS SHOREHAM	Sandown class MCM vessel	15 Mar – 4 Aug	
Afloat Support Group			
RFA BAYLEAF	Fleet support tanker	– 12 Apr	
RFA BRAMBLELEAF	Fleet support tanker	6 Jan –	
RFA FORT AUSTIN	Fleet support stores ship	24 Jan – 28 May	with 4 Sea King Mk 6 (820 NAS)
RFA FORT ROSALIE	Fleet support stores ship	9 Feb – 28 May	
RFA FORT VICTORIA	Fleet support tanker and stores ship	18 Jan –	with 4 Merlin (814 NAS)
RFA GREY ROVER	Small fleet tanker	30 Jan – 20 Apr	retasked from South Atlantic
RFA ORANGELEAF	Fleet support tanker	2 Feb – 28 May	
RFA DILIGENCE	Forward repair ship		
RFA ARGUS	Primary casualty receiving ship	15 Jan – 28 May	with 2 Sea King Mk 6 (820 NAS)
RFA SEA CRUSADER	Strategic lift ro-ro	5 Feb – 26 May	
HMS ROEBUCK	Hydrographic survey vessel	– 9 Jun	already in theatre
6 x chartered commercial shipping			
6 x Strategic Sealift Capability (ro-ro ferries), manned by Sponsored Reserves			

Naval Air Squadrons (NAS)

embarked as shown under 'Aircraft' column above

814 Naval Air Squadron	845 Naval Air Squadron
815 Naval Air Squadron	847 Naval Air Squadron
820 Naval Air Squadron	849 Naval Air Squadron

Royal Naval Reserve

Reservists from the following Reserve Training Centres:

HMS CAMBRIA (Sully), HMS CALLIOPE (Newcastle/Gateshead), HMS CAROLINE (Belfast), HMS DALRIADA (Greenock/Glasgow), HMS EAGLET (Liverpool), HMS FERRET (Chicksands), HMS FLYING FOX (Bristol), HMS FORWARD (Birmingham), HMS KING ALFRED (Portsmouth), HMS PRESIDENT (London), HMS SCOTIA (Rosyth), HMS SHERWOOD (Nottingham), HMS VIVID (Plymouth), HMS WILDFIRE (Northwood), RNR Air Branch at HMS HERON (RNAS Yeovilton)

Royal Marines and Commando Forces

HQ 3 Commando Brigade Royal Marines
40 Commando Royal Marines
42 Commando Royal Marines
UK Landing Force Command Support Group
Commando Logistic Regiment Royal Marines
29 Commando Regiment Royal Artillery
539 Assault Squadron Royal Marines
9 Assault Squadron Royal Marines
59 Independent Commando Squadron Royal Engineers
131 Independent Commando Squadron Royal Engineers (Volunteers)

Elements of:

Commander UK Amphibious Forces
45 Commando Royal Marines
20 Commando Battery Royal Artillery
Fleet Protection Group Royal Marines
4 Assault Squadron Royal Marines
Royal Marines Band Service
Royal Marine Reserve City of London
Royal Marine Reserve Scotland
Royal Marine Reserve Bristol
Royal Marine Reserve Merseyside
Royal Marine Reserve Tyne

**A Landing Craft Air Cushioned patrols
the Az Zubayr river by Umm Qasr**



Army

units from which elements were deployed are shown in italics

Headquarters

1 (UK) Armoured Division HQ and Signal Regiment
3 (UK) Armoured Division HQ and Signal Regiment
4 Armoured Brigade HQ and Signals Squadron
7 Armoured Brigade HQ and Signals Squadron
16 Air Assault Brigade HQ and Signals Squadron
102 Logistics Brigade HQ and Signals Squadron

Royal Horse Artillery

3rd Regiment Royal Horse Artillery
7 (Parachute) Regiment Royal Horse Artillery

Household Cavalry and Royal Armoured Corps

The Household Cavalry Regiment
1st The Queen's Dragoon Guards
The Royal Scots Dragoon Guards
The Queen's Royal Lancers
1st Royal Tank Regiment (Joint NBC Regiment)
2nd Royal Tank Regiment
The Royal Yeomanry

Royal Regiment of Artillery

5 Regiment Royal Artillery
12 Regiment Royal Artillery
26 Regiment Royal Artillery
32 Regiment Royal Artillery
40 Regiment Royal Artillery
47 Regiment Royal Artillery
395 Air Defence Troop (Volunteers)

Corps of Royal Engineers

12 (Air Support) Engineer Brigade HQ
23 Engineer Regiment
28 Engineer Regiment
32 Engineer Regiment
33 Engineer Regiment (*Explosive Ordnance Disposal*)
36 Engineer Regiment
38 Engineer Regiment
39 Engineer Regiment (*Airfield Support*)
42 Engineer Regiment (*Geo*)
Military Works Force 62 and 63 Specialist Teams
Military Works Force 64 Specialist Team
Civil Affairs Group
412 Amphibious Troop Royal Engineers (Volunteers)

Royal Corps of Signals

2 Signal Regiment
10 Signal Regiment
14 Signal Regiment
21 Signal Regiment
30 Signal Regiment
Royal Signals System Support Team
Army Tactical Computer System Support Team

Regiment of Foot Guards

1st Battalion Irish Guards

Infantry

1st Battalion The Royal Regiment of Fusiliers
1st Battalion *The Light Infantry*
1st Battalion The Royal Irish Regiment
1st Battalion The Duke of Wellington's Regiment
1st Battalion The Black Watch (Royal Highland Regiment)
1st Battalion The Parachute Regiment
3rd Battalion The Parachute Regiment
4th Battalion *The Parachute Regiment (Volunteers)*

Army Air Corps

3 Regiment, Army Air Corps

Royal Logistics Corps

1 General Support Regiment, Royal Logistics Corps
2 Close Support Regiment, Royal Logistics Corps
6 Supply Regiment, Royal Logistics Corps
7 Transport Regiment, Royal Logistics Corps
8 Transport Regiment, Royal Logistics Corps
9 Supply Regiment, *Royal Logistics Corps*
10 Transport Regiment, *Royal Logistics Corps*
11 Explosive Ordnance Disposal Regiment, *Royal Logistics Corps*
13 Air Assault Support Regiment, Royal Logistics Corps
17 Port and Maritime Regiment, Royal Logistics Corps
23 Pioneer Regiment, Royal Logistics Corps
24 Regiment, Royal Logistics Corps
27 Transport Regiment, *Royal Logistics Corps*
29 Regiment, *Royal Logistics Corps*
132 Aviation Supply Squadron, *Royal Logistics Corps*
165 Port and Maritime Regiment, Royal Logistics Corps (Volunteers)
166 Supply Regiment, *Royal Logistics Corps (Volunteers)*
496 Logistic Liaison Unit, Movement Support Group, Royal Logistics Corps (Volunteers)
101 Military Working Dogs

Royal Army Medical Corps

1 Close Support Medical Regiment
4 General Support Medical Regiment
5 General Support Medical Regiment
16 Close Support Medical Regiment
33 Field Hospital
34 Field Hospital
202 Field Hospital (Volunteers)

Royal Electrical and Mechanical Engineers

2nd Battalion, Royal Electrical and Mechanical Engineers
3rd Battalion, Royal Electrical and Mechanical Engineers
7 Air Assault Battalion, Royal Electrical and Mechanical Engineers

Royal Military Police

1 Regiment, Royal Military Police
5 Regiment, Royal Military Police
156 Provost Company Royal Military Police

Intelligence Corps

1st Military Intelligence Brigade
1 Military Intelligence Battalion
2 Military Intelligence Battalion
3 Military Intelligence Battalion (Volunteers)
4 Military Intelligence Battalion
15 (United Kingdom) Psychological Operations Group

Defence Fire Service

Defence Fire Service (Army)

Equipment

Ground combat systems

Challenger 2	116
Challenger Armoured Repair & Recovery Vehicle	26
Warrior (Infantry Carrying Vehicle)	140
Warrior (Command Vehicle)	26
Warrior (Recovery/Repair Vehicle)	46
Combat Vehicle Reconnaissance (Tracked) - Scimitar	66
Fuchs NBC vehicle	12

Artillery and Air Defence

AS90 self-propelled gun	36
Warrior (Observation Post)	24
Combat Vehicle Reconnaissance (Tracked) - Striker (Swingfire)	12
105mm Light Gun	39
Rapier Launcher	3
Phoenix Launcher	4
Phoenix Air Vehicle	29

Helicopters

Gazelle	16
Lynx	18
Chinook	11
Puma	7
Sea King	10

Engineer equipment

Chieftain Armoured Vehicle Royal Engineer (Fascine Layer)	12
Chieftain Armoured Vehicle Launching Bridge	12
Shielder	10
Combat Engineer Tractor	24
M3 Pontoon Vehicle	30
BR90 Truck-borne Bridging Equipment	4

Transport and Movements

Demountable Rack Offloading & Pickup System (DROPS)	464
DROPS Trailer	149
Light Equipment Transporter (LET)	29
LET Trailer	24
Heavy Equipment Transporter (HET)	61
HET Trailer	60

Fuel Vehicles and Utility

Bulk Fuel	162
Multi-Wheeled Drive (Water)	7
Rough Terrain Container Handler	8
Container Handling Rough Terrain	15
Recovery Vehicle 6x6	93
Battlefield Ambulance	173

Royal Air Force

Squadron	Station	Aircraft / Other notes	Deployment dates
Strike aircraft (68)			
1(F), 3(F)a and IV(AC) Sqns	RAF Cottesmore	20 Harrier GR7	23 Feb, 9 Mar
12(B) and 617 Sqns	RAF Lossiemouth	12 Tornado GR4	28 Jan, 6 Feb, 11 Feb
II(AC), IX(B) and 31 Sqns	RAF Marham	18 Tornado GR4/4A	19 Feb, 27 Feb
111(F) and 43(F) Sqns	RAF Leuchars	14 Tornado F3	6 Mar, some already in theatre
6, 41 and 54 Sqns	RAF Coltishall	4 Jaguar GR3A	in Turkey (but not used in combat)
Support aircraft (47)			
120, 201 and 206 Sqns	RAF Kinloss	7 Nimrod MR2 reconnaissance	4 Mar, 5 Mar
8 and 23 Sqns	RAF Waddington	4 E-3D Sentry airborne early warning	28 Feb, 2 Mar
10 and 101 Sqns	RAF Brize Norton	9 VC-10 tanker aircraft	1 Mar, 4 Mar, 9 Mar
99 Sqn	RAF Brize Norton	4 C-17 transport aircraft	from 16 Jan
216 Sqn	RAF Brize Norton	4 Tristar tanker aircraft	22 Feb, in theatre
51 Sqn	RAF Waddington	1 Nimrod R1 reconnaissance	1 Mar
32 (The Royal) Sqn	RAF Northolt	4 HS125	14 Jan, 24 Feb, 2 Mar, 7 Mar
39 (1 PRU) Sqn	RAF Marham	2 Canberra PR9 reconnaissance	9 Mar
24, 30, 47 and 70 Sqns	RAF Lyneham	12 C-130K & C-130J transport aircraft	3 Mar, 21 Mar
Support helicopters (27)			
7, 18 and 27 Sqns	RAF Odiham	20 Chinook helicopters	8 Feb
33 Sqn	RAF Benson	7 Puma helicopters	8 Feb
Ground support			
16 Sqn RAF Regiment	RAF Honington	Ground-based air defence	in theatre
1 Sqn RAF Regiment	RAF St Mawgan	Force protection	3 Feb
II Sqn RAF Regiment	RAF Honington	Force protection	28 Dec
34 Sqn RAF Regiment	RAF Leeming	Force protection	31 Jan
27 Sqn RAF Regiment	RAF Honington	Joint NBC Regiment	from 2 Feb
51 Sqn RAF Regiment	RAF Lossiemouth	Joint Helicopter Force protection	15 Feb
1 TAC STO	RAF Wittering	Tactical Survive to Operate	12 Feb
3 TAC STO	RAF Marham	Tactical Survive to Operate	7 Feb
4 TAC STO + HQ	RAF Lyneham	Tactical Survive to Operate	in theatre
Joint Helicopter Force HQ	RAF Odiham & RAF Benson		23 Jan
Mobile Air Operations Teams	RAF Benson		8 Feb
Tactical Supply Wing	RAF Stafford		29 Jan
Mobile Catering Support Units	Various		22 Feb
Tactical Communications Wing	Various		10 Feb
UK Mobile Air Movements Sqn	Various		28 Jan
Joint Force Air Contingent HQ	RAF High Wycombe	Staff from UK Air Contingent HQ/ Combined Air Operations Centre	5 Feb
2 Military Transport	RAF Stafford	In-theatre transport	22 Feb
5131(BD) Sqn	RAF Marham	Bomb disposal	20 Feb
Tactical Imagery	RAF Marham		20 Feb
Intelligence Wing			
Tactical Provost Wing	RAF Henlow		7 Feb
5001(EAF) Sqn	RAF Stafford	Expeditionary Airfield Facilities	7 Mar
Tactical Armament Squadron	RAF Marham		9 Feb
Tactical Property Management	RAF Benson		29 Jan
Tactical Medical Wing	Various		15 Feb
Mobile Meteorological Unit	RAF Benson		1 Feb

Royal Auxiliary Air Force and ex-regular Reserve personnel were also deployed

Operations in Iraq – Provisional statistics

Total UK forces

(see also breakdown of forces deployed)

Land	28000
Maritime (19 RN ships & submarines, 14 RFA, 43 helicopters)	9000
Air (115 aircraft, 27 helicopters)	8000
NCHQ and others	1000
Total	46000
Coalition total	467000

Air Campaign

No of UK sorties:

Offensive strike	1353
Air defence	169
Airborne early warning	87
Reconnaissance	274
Air-to-air refuelling	355 (dispensing 18,884,000 lbs of fuel)
Airlift within theatre	263
Aero-medical	18

Total	2519
Coalition total	41400

No of UK weapons released:

Tomahawk land attack missile	*
Storm Shadow stand-off missile	27
Enhanced Paveway II precision-guided bomb	394
Enhanced Paveway III precision-guided bomb	10
Paveway II laser-guided bomb	265
Maverick anti-armour missile	38
ALARM anti-radar missile	47
Non-precision-guided munitions	138

Total	919*
Coalition total	29200

**Substantial number of Tomahawk missiles launched from submarines; precise number classified and excluded from totals*



Royal Marines from 3 Commando Brigade in Kuwait.

