For three months, it was all the rage. Then its popularity faded fast.

What Happened to Shock and Awe?

By John T. Correll

HOCK and awe," Peter Arnett intoned over and over. "This is shock and awe." Arnett was reporting for NBC from Baghdad as the aerial bombardment lit up the night sky on March 21.

It was "A-day," the beginning of full air combat operations in Gulf War II. As the live television cameras watched, coalition airpower was obliterating Saddam Hussein's Presidential compound on the other side of the Tigris River and other government and military sites in and around Baghdad.

Arnett was not alone in calling it "shock and awe." That term, which had burst suddenly into public awareness in January, was by then in nearuniversal usage to describe the US strategy for Operation Iraqi Freedom.

"Shock and awe" was repeated endlessly. In the week the war began, more than 600 news reports around the world referred to "shock and awe," according to a count by the *Washington Post*.

Military strategists from Sun Tzu to Clausewitz have understood the value of destroying the enemy's will to resist, but Shock and Aweintroduced by a 1996 study aimed at Pentagon insiders—took it to higher levels. Shock and Awe meant an attack so massive and sudden that the enemy would be stunned, confused, overwhelmed, and paralyzed.

Harlan K. Ullman, principal architect of the concept, explained to the *Long Island Newsday* in February, "What we want to do is to create in the minds of the Iraqi leadership, and their soldiers, this Shock and Awe, so they are intimidated, made to feel so impotent, so helpless, that they have no choice but to do what we want them to do, so the smartest thing is to say, 'This is hopeless. We quit.'"

The Department of Defense did not officially or explicitly endorse Shock and Awe, but traces of it could be discerned in statements by top leaders.

For example, Gen. Tommy R. Franks, commander of US Central Command, said at a press briefing in Qatar March 22, "This will be a campaign unlike any other in history, a campaign characterized by shock, by surprise, by flexibility, by the employment of precise munitions on Baghdad, March 27, 2003. It wasn't Dresden in February 1945. In fact, it wasn't anything like the vast air assault of media imaginings.



a scale never before seen, and by the application of overwhelming force."

Franks said, "Coalition airmen [will] deliver decisive precision shock, such as you witnessed beginning last night." He said that the attack was carried out by "shock air forces."

Popular enthusiasm for Shock and Awe was high as the war began. However, the Iraqi regime was not shocked and awed into immediate surrender. The war entered a second week, then a third.

The questions were not long in coming. Where was the Shock and Awe? Was the strategy bogging down? Baghdad fell to coalition forces after 20 days, but, by then, Shock and Awe had dropped precipitously in public opinion.

Among the disillusioned was Peter Arnett, who told state-controlled Iraqi television in a cloying interview March 30 that "the war plan has failed because of Iraqi resistance." When NBC fired him, Arnett expressed—what else?—shock and awe.

Six months later, Shock and Awe had faded badly. It was showing up as a catch phrase in advertising and war games, but military people were keeping their distance and the analysis concentrated mostly on what went wrong.

Where It All Began

It started in December 1996 with "Shock & Awe: Achieving Rapid Dominance," published by National Defense University. The authors were Harlan K. Ullman and James P. Wade Jr. It was a product of Defense Group Inc., a beltway consulting firm headed by Wade, who had previously held many senior positions in the Pentagon.

Four retired military officers— Adm. Leon A. Edney, Army Gen. Fred M. Franks, Air Force Gen. Charles A. Horner, and Adm. Jonathan T. Howe—took part in the study, but the principal author was Ullman.

Colin Powell, who met Ullman at the National War College, heaped praise on him in his autobiography, *My American Journey* (1995). "A teacher who raised my vision several levels was Harlan Ullman, a Navy lieutenant commander who taught military strategy," Powell wrote. "So far, I had known men of action but few who were also authentic intellectuals. Ullman was that rarity, a scholar in uniform, a line officer qualified for command at sea, also possessed of one of the best, most provocative minds I have ever encountered."

The goal of Rapid Dominance, the 1996 NDU study said, "will be to destroy or so confound the will to resist that an adversary will have no alternative except to accept our strategic aims and military objectives. To achieve this outcome, Rapid Dominance must control the operational environment and through that dominance, control what the adversary perceives, understands, and knows, as well as control or regulate what is not perceive, understood, or known."

Four defining characteristics of Rapid Dominance were listed: knowledge of the battlespace environment, rapidity, control of the environment, and "operational brilliance in execution."

In a Desert Storm-type campaign of the future, Rapid Dominance might achieve its objectives "*in a matter of days (or perhaps hours)* and not after the six months or the 500,000 troops that were required in 1990 to 1991," the study said. (Emphasis added.)

"Shutting the country down would entail both the physical destruction of appropriate infrastructure and the shutdown and control of the flow of all vital information and associated commerce so rapidly as to achieve a level of national shock akin to the effect that dropping nuclear weapons on Hiroshima and Nagasaki had on the Japanese. Simultaneously, Iraq's armed forces would be paralyzed with the neutralization or destruction of its capabilities. Deception, disinformation, and misinformation would be applied massively."

Ullman and Wade acknowledged they were building on classic military theories but said that, "in Rapid Dominance, the principal mechanism for affecting the adversary's will is through the imposition of a regime of Shock and Awe sufficient to achieve the aims of policy. It is this relationship with and reliance on Shock and Awe that differentiates Rapid Dominance from attrition, maneuver, and other military doctrines including overwhelming force."

One of the early supporters of Shock and Awe was a former—and future—Secretary of Defense, Donald H. Rumsfeld. In fact, Ullman later said, "Rumsfeld was a rump member of the original shock-and-awe group, so he knew about the concept."

Rumsfeld used the expression in an April 1999 statement to CNN, criticizing the strategy for the air war in Serbia as insufficiently forceful. "There is always a risk in gradualism," Rumsfeld said. "It pacifies the hesitant and the tentative. What it doesn't do is shock, and awe, and alter the calculations of the people you're dealing with."

In October 1999, Rumsfeld joined three other former Secretaries of Defense, Harold Brown, Frank C. Carlucci, and James R. Schlesinger, in commending Shock and Awe to William S. Cohen, who was then Secretary of Defense. "We are writing to you in support and endorsement of the concept of Rapid Dominance," they said. "We believe that the concept of Rapid Dominance has sufficient merit to warrant further evaluation and experimentation."

Rumsfeld's interest apparently continued. In March 2000, Cohen wrote to Rumsfeld, thanking him "for your letter on the work being performed by Defense Group Inc. (DGI) on the concept of Rapid Dominance. We are of course interested in further developing our ability to strike promptly and induce 'Shock and Awe' in future adversaries."

The Bubble Rises

The first public report of Shock and Awe was by CBS News correspondent David Martin, last Jan. 24, two months before Gulf War II began. An unnamed Pentagon official told Martin that the strategy would be Shock and Awe. Martin went for comment to Ullman, who was then a senior advisor for the Center for Strategic and International Studies and a columnist for the *Washington Times*.

"We want them to quit. We want them not to fight," Ullman told CBS, explaining that the concept relied on a "simultaneous effect, rather like the nuclear weapons at Hiroshima, not taking days or weeks but in minutes. ... You're sitting in Baghdad, and all of a sudden, you're the general and 30 of your division headquarters have been wiped out. You also take the city down. By that, I mean you get rid of their power, water. In two, three, four, five days they are physically, emotionally, and psychologically exhausted."

Martin reported that not everybody in the Administration was a believer in Shock and Awe. "One senior official called it a bunch of bull, but confirmed it is the concept on which the war plan is based," he said.

"You'll see simultaneous attacks of hundreds of warheads, maybe thousands, so that very suddenly, the Iraqi senior leadership, or much of it, will be eviscerated," Ullman told the *Christian Science Monitor* Jan. 30.

For the next several weeks, the Shock and Awe phrase was heard periodically, mostly from television talk show guests who disagreed with it. References escalated sharply after a press breakfast on March 4 featuring Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff.

"If asked to go into conflict in Iraq, what you'd like to do is have it be a short conflict," Myers said. "The best way to do that would be to have such a shock on the system that the Iraqi regime would have to assume early on the end was inevitable."

"Top General Sees Plan To Shock Iraq Into Surrendering," said the headline in the *New York Times*. It quoted "military officials" as saying "the plan calls for unleashing 3,000 precision guided bombs and missiles in the first 48 hours."

("I don't think I ever used the term 'Shock and Awe' myself," Myers said in April, but added, "I'm familiar with the book and the author" and "some of those ideas of his have been incorporated into this plan.")

Fascination with Shock and Awe was approaching frenzy. No news report was complete without it.

Sony applied for a trademark on Shock and Awe to use as the title of a video game, but dropped the application in embarrassment when it was discovered by the news media. Others sought to trademark Shock and Awe for pesticides and herbicides, barbecue sauce, and fireworks displays.

Cautions and Concerns

Ullman made it clear he had no direct input to the war plan, but he published his views regularly in oped columns and he was interviewed often by both print and broadcast media. He told the *Washington Post* in March that one risk of a bold war plan was that it might be executed too cautiously, and expressed concern that "we may not be sufficiently audacious."

Shock and Awe alarmed those who misinterpreted references to Hiroshima and Nagasaki. For example, Ira Chernus, a professor of religious studies at the University of California, charged that Ullman "wants to do to Baghdad what we did to Hiroshima."

"People think that Shock and Awe is to destroy cities," Ullman said. "That's not the rationale. The rationale is to bring intense pressure on the enemy and do minimum damage to civilian infrastructure."

Rep. Major R. Owens (D-N.Y.) read a rap poem, titled "Shock and Awe," into the *Congressional Record*, declaring, "The war against Iraq is an unnecessary evil."

US leaders did not join in the predictions of instant victory. "It is not knowable how long that conflict would last," Rumsfeld said in February. "It could last six days, six weeks. I doubt six months."

In his address to the nation March 19, President Bush warned, "A campaign on the harsh terrain of a nation as large as California could be longer and more difficult than some predict."

At a Pentagon news briefing March 20, Rumsfeld said: "What will follow will not be a repeat of any other conflict. It will be of a force and a scope and a scale that has been beyond what has been seen before. The Iraqi soldiers and officers must ask themselves whether they want to die fighting for a doomed regime or do they want to survive, help the Iraqi people in the liberation of their country, and play a role in a new, free Iraq."

Coalition aircraft dropped millions of leaflets urging Iraqi military forces to lay down their arms. Responding to a tip from the CIA, two stealthy F-117s struck a leadership compound in Baghdad March 19—two days before A-day—hoping to catch Saddam Hussein there. They clobbered the compound, but they didn't get Saddam.

Shock and Awe on Defensive

The full air campaign began on March 21. The spectacular bombardment the world watched on television the first night was part of a broader attack that sent 1,000 strike sorties against military targets in Baghdad, Kirkuk, Mosul, and elsewhere.

What the fires and explosions seen on the skyline did not show was the extraordinary precision of the strikes and the care taken to avoid hitting the civilian population. The effect on military and government targets was ruinous.

However, it was not what the public expected, having been spun up by hundreds of stories about Shock and Awe. Saddam Hussein's regime did not fall overnight.

"On the second day of the war, the coalition attempted to deliver a knockout punch with a bombing assault strike planners hoped would convince Iraqi leaders to surrender," said *European Stars and Stripes.* "They called it the 'Shock and Awe' campaign. It did not draw the mass surrenders planners had hoped."

The Washington Times reported a "problem of expectations," noting that "the Pentagon did not dispute a news report that the allies would drop 3,000 precision guided munitions in the war's first 24 hours. In reality, after four days of bombing, the coalition had dropped 2,000 PGMs, averaging 500 every 24 hours."



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ideal for television.

At his Pentagon news briefing March 25, Rumsfeld was asked: "Is it possible that you did raise expectations beyond reasonable levels by talking about a Shock and Awe campaign? I mean, wasn't the impression put out that, you know, 3,000 bombs are going to fall in the first 48 hours and the regime is going to collapse?"

"Not by me, not by General Myers," Rumsfeld replied. "Why would we have put in train the hundreds of thousands of people to go do this task if we thought it was going to be over in five minutes?"

"The air campaign that the Pentagon promised would 'shock and awe' Saddam Hussein's government appears to have done neither," said Michael Gordon in the *New York Times*.

Professor Robert Pape of the University of Chicago, a frequent critic of airpower, told the *New York Times* on March 26, "The main thing we've learned from this is that 'Shock and Awe' hasn't panned out. The targeting hasn't broken the back of the leadership."

Actually, the campaign at that point—whether it was Shock and Awe or something else—had broken the back of the Iraqi regime.

The ground forces took Baghdad in three weeks without a major battle and meeting little effective resistance, mainly because the Republican Guard divisions in their path had been demolished by airpower. Interviews afterward with Republican Guard officers indicated that airpower had indeed taken the starch out of the Iraqi Army's will to resist.

Nevertheless, Ullman said, "Public reaction to the Pentagon's 'Shock and Awe' slogan was hugely negative." It was, he said, "a public relations disaster."

The public continued to support the war, but deterioration of regard for the Shock-and-Awe label could be tracked in the headlines:

• "US Plan To Convince Iraqis To Surrender En Masse Has Flopped," *Atlanta Journal–Constitution*, March 22.

• "Allies Prewar Assumptions Fall Short as Iraq Resistance Stiffens," USA Today, March 25.

• "War Could Last Months, Officers Say," *Washington Post*, March 27.

■ "Too Little Shock, Not Enough Awe," *Los Angeles Times*, March 30.

• "No Shock, No Awe: It Never Happened," WorldNetDaily.com, April 3.

But Was It Shock and Awe?

"What they announced at the beginning of the war as Shock and Awe seems to me was largely PR," Ullman told the *Washington Times* on March 31. "It did not bring the great Shock and Awe that we had envisaged."

"The public misunderstood our concept of Shock and Awe—and so, perhaps, did the Pentagon," Ullman said in a signed column entitled " 'Shock and Awe' Misunderstood" in USA Today on April 8. "Our concept calls for a 360-degree, nonstop campaign using all elements of power to coerce the enemy regime into succumbing rapidly and decisively.

"That has not happened in this war for two major reasons: The opportunity to target Saddam accelerated the war's start before all of the military elements were in place, and the decision to pause to see whether Saddam's generals would choose not to fight tempered the intensity of the initial onslaught. The Administration's version of Shock and Awe turned out to be a strategic air campaign and quick ground advance. This plan soon will defeat Saddam's regime, overwhelmingly, as it now appears, but it did not cause its immediate collapse."

(Rumsfeld and Franks said the "operational pause" never happened.)

In the June issue of the Royal United Services Institute's *RUSI* Journal, Ullman said, "Despite the prewar hoopla of Shock and Awe," the campaign was not based principally on obtaining those effects prescribed by the original concept. ...

"In the run-up to the war, it is possible that advocates of strategic bombing jumped on the term Shock and Awe as a means of publicizing that approach and in the expectation that such bombing alone could indeed bring Saddam down. ...

"Had the targeting from the beginning of the war been focused on the Iraqi Army and the arms of political power, such as the Baathist Party and its infrastructure throughout the country, who knows how long the fight might have lasted? After a few days, with the knowledge that his Army and political control of the country no longer existed, Saddam might have quit or fled the field in a matter of days or a week or two."

Deputy Secretary of Defense Paul D. Wolfowitz told CBS on April 1, "We never targeted infrastructure. We've gone to great lengths to avoid it, in fact, in contrast to 1991, when there was some deliberate targeting of those functions that had both a military and a civilian application."

Asked about Shock and Awe, Wolfowitz said, "I don't care for that phrase." Gen. T. Michael Moseley, then the Gulf War II combined force air component commander, was of similar opinion. "The term Shock and Awe has never been a term that I've used. I'm not sure where that came from," Moseley said at a press briefing, April 5.

By summer, Shock and Awe had become a cliche, applied in situations ranging from the box office boom of "The Matrix Reloaded" to a ninth inning home run by San Francisco Giants slugger Barry Bonds to (by political activist Tom Hayden) Arnold Schwarzenegger's announcement that he would run for governor of California.

The Issue of Airpower

Some critics saw Shock and Awe as nothing more than strategic airpower wearing a new hat. "Air Force theorists have long touted strategic bombing as the best way to break the will and muscle of the enemy," John Barry and Evan Thomas wrote in *Newsweek*.

Robert Pape told the *Christian* Science Monitor that "Shock and Awe is what air forces have been doing since World War I—that is always the plan. This is the 'same old.' We want to believe it is something new, because we want to believe we're always bigger and better. But the fact is, if there are new twists and turns, this won't be it."

Those sour assessments did not accurately describe strategic airpower or Shock and Awe.

Air Force doctrine recognizes (as Napoleon did) surprise as one of the major principles of war and lists shock as one of the products of surprise. Doctrine further identifies strategic attack as one the functions of air and space power. In turn, strategic attack is directed at both the capability and the will of the enemy to continue the fight. The objectives "often include producing effects to demoralize the enemy's leadership, military forces, and population."

Ullman and Wade in 1996 drew a distinction between Shock and Awe and doctrines of strategic attack. In 2003, Ullman sometimes sounded as if he regarded airpower as the antithesis of the concept.

"As I see it, this air campaign appears to come out of a book by strategic airpower advocates, who have argued that you start at the center and work your way out to disrupt and destroy whatever," Ullman told the *Washington Times* on March 31.

"We come up with the opposite view," he continued. "Take away [Saddam's] ability to run the country and the ability to fight. The argument is, that may cause a sufficient amount of 'Shock and Awe', it will force them to surrender. ... As we theoretically envisaged it, we would have gone straight after the Republican Guard and its leadership and not just with precision guided weapons."

Ullman told the *Guardian* (UK) on March 25, "The phrase, as used by the Pentagon now, has not been helpful—it has created a doomsday approach—the idea of terrorizing everybody. In fact, that's not the approach. The British have a much better phrase for it: effects-based operations."

Ullman was unaware, apparently, that the Air Force was preaching and practicing Effects-Based Operations long before the appearance of Shock and Awe. In Effects-Based Operations the objective is not always destruction of the enemy. It may be to gain a specific strategic or tactical result, such as deterring, neutralizing, or halting the enemy force. One of the Air Force advocates in the early 1990s of Effects-Based Operations was David A. Deptula, now a major general and director of plans and programs at Air Combat Command.

On March 19, one of Deptula's officers, Col. Gary Crowder, briefed the Pentagon on Effects-Based Operations. One of his slides listed Shock and Awe as a related concept.

"You don't win a war by not intimidating an adversary," Crowder said in response to a question. "I think the effects that we are trying to create are to make it so apparent and so overwhelming at the very outset of potential military operations that the adversary quickly realizes that there is no real alternative here other than to fight and die or to give up. ...What will happen is the great unknown. ... I think there's going to be a wide variety of different reactions by the Iraqi people and the Iraqi military forces."

In Desert Storm in 1991, the Air Force also inaugurated the practice of "Parallel Warfare," attacking all of the enemy's vital systems and assets at once rather than stringing the attacks out over days and weeks. It was only in recent years that technology made such an approach possible.

Strategic airpower, Effects-Based Operations, and Parallel Warfare have characteristics in common with Shock and Awe, but they are far from synonymous with it.

Lt. Col. John R. Hunerwadel of the Air Force Doctrine Center said that the phrase "Shock and Awe" does not appear in any doctrine documents and that "there is not enough 'meat on the bones' to merit inclusion in doctrine" at this point.

"Strategies that include decapitation, isolation, shock-like effects, and coercion against enemy leadership are a vital part of Air Force warfighting," Hunerwadel said. "Such effects have been used successfully to achieve objectives in many conflicts. In all cases, however, such effects are only part of a larger joint or combined strategy designed to manipulate the enemy's will. They seldom work in isolation and are not successful in all circumstances—they are elements of strategy, not doctrinal principles.

"This is an important distinction. Strategies are specific sets of objectives, courses of action, and tools tied to a particular conflict. Doctrine, on the other hand, is the accumulated wisdom of many conflicts. It represents our central and enduring beliefs about how to wage war.

"What worked for one particular strategy in one particular conflict does not necessarily apply to others. For example, Shock and Awe-like effects may have been appropriate in Iraq. They were not appropriate against Serbia, however, where alliance concerns precluded them and evidence suggests that the growing pressure against strategic targets over time enabled successful coercion while preserving NATO's resolve. Different places, foes, and times call for different strategies. Shock and Awe-like effects were merely one element of one strategy, merely one tool in the strategist's tool kit."

How To Explain It?

A combination of factors seems to account for the three-month rollercoaster ride in public opinion for Shock and Awe.

• "Shock and Awe" was short, catchy, ideal for television. Reporters and commentators used it as a shorthand for the strategy. Most of those mouthing the phrase had only a superficial grasp and interest.

The news media and the commentators did not know what the real strategy was. No defense leader and least of all the secretive Rumsfeld—would announce the war plan in advance.

Relatively few military people had seen the Shock and Awe paper or heard the briefing. Most of them who used the term in offhand comments quoted by the news media had picked it up from television.

• The Pentagon's Shock and Awe was not the same as Ullman's Shock and Awe. For the Pentagon, it was one element of the strategy—and not necessarily the most important element. For Ullman, it was the most important thing. Among other differences, Ullman called for attacking everything—including the power



than what happened.

and water supply—to stun and intimidate the enemy. The Pentagon ruled out destruction of the civilian infrastructure.

In its pure form, Shock and Awe was probably not a practical candidate for an operational strategy, but the public didn't understand that, and the people stirring up the excitement didn't explain it.

• Although top defense officials did not say the strategy was Shock and Awe, they left that impression. They may not have been talking about Shock and Awe, but they often sounded as if they were. They used words like "shock" in dramatic context. They talked about a "campaign unlike any other in history" (Franks) and conflict "of a force and a scope and a scale that has been beyond what has been seen before" (Rumsfeld).

It was not the job of the Department of Defense to correct expectations generated by others. Indeed, not doing so may have been a form of passive disinformation. The erroneous expectations were no doubt of value in keeping Saddam off balance—but they also set up a popular misunderstanding in the United States.

• Because of the precision of the attack and the care taken to avoid collateral damage, the destruction in evidence the morning after the initial attack was not as vast as those who watched the bombardment on television the night before had an-

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One report had called it "the most devastating air raid since Dresden." It wasn't—which the war planners had gone to great pains to ensure but it wasn't what the public had been coached to expect.

So far as most people could see over the following week or two, the "campaign unlike any other in history" looked pretty much like previous operations.

• There had also been an expectation of fast results. When the conflict was a week old, Ullman told the *Journal News* in upstate New York that people outside the military who did not understand Shock and Awe "thought it would be won in two days. That is absurd. If it is done in two months, that will be remarkably positive."

Many people had contributed to that expectation, including Ullman himself, who told CBS in January that it might take minutes instead of days or weeks to yield a "simultaneous effect" with Shock and Awe.

• Confidence in Rumsfeld's war plan was undercut by criticism, especially from disgruntled retired officers. Since—according to the talk shows—Rumsfeld's strategy was Shock and Awe, it suffered a full share of whatever damage accrued. Lost in the shuffle was the fact that the campaign being executed was not Ullman–Wade-style Shock and Awe.

What now for Shock and Awe? It is still alive, but it is back in the insider world of studies and analysis, modeling, simulation, and wargaming.

"One assumes that there will be extensive examination and lessonslearned exercises of this war and its aftermath done both within Ministries and Departments of Defense as well as in the press," Ullman said in his *RUSI Journal* piece. "It would be unfortunate, based on the negative publicity, to abandon any reconsideration of Shock and Awe as part of these exercises."

Defense Group Inc. said that "Rapid Dominance: Shock and Awe" has continued to mature. Studies for the Department of Defense have expanded on several aspects of it, and DGI is currently working with the Defense Advanced Research Projects Agency to look more closely at the concept "in operational art and with emerging DARPA technologies."