Originally Processed With FOIA(s):
S; 1998-0255-F

FOIA Number:

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the George Bush Presidential Library Staff.

Record Group/Collection:	George H.W. Bush Presidential Records
Collection/Office of Origin:	Speechwriting, White House Office of
Series:	Snow, Tony, Files
Subseries:	Subject File, 1988-1993

OA/ID Number:	13894
Folder ID Number:	13894-021

Folder Title:
[Heritage Foundation, 2/8/91]

Stack:	Row:	Section:	Shelf:	Position:
G	18	29	2	2

The Heritage Foundation Backgrounder

No. 808 | The Heritage Foundation 214 Massachusetts Avenue N.E. Washington, D.C. 20002 (202) 546-4400

February 8, 1991

CONGRESS BICKERED OVER WEAPONS NOW PROVING THEMSELVES IN THE GULF

INTRODUCTION

The early days of the war against Iraq confirm that high-technology weapons are America's trump card against Saddam Hussein. America's top-of-the-line warplanes and missiles have destroyed much of Iraq's air, industrial, nuclear, and chemical military power, and they have given allied forces air supremacy over the 700-strong Iraqi air force. Now these weapons are hammering Saddam's ground forces, cutting their supplies and weakening their ability to fight a land battle. The defensive *Patriot* missile, meanwhile, has spread a protective shield over Saudi and Israeli populations. Hundreds and perhaps thousands of lives have been saved by the *Patriot's* ability to knock almost all Iraqi *Scud* missiles out of the sky.

Had many members of Congress had their way, however, America would not have these weapons which are winning the war against Saddam Hussein. Critics in the 1980s charged that aircraft carriers, F-15 *Eagle* fighters, *Patriot* air defense missiles, and other high-tech weapons were too expensive or unworkable. Yet Ronald Reagan and George Bush continued to push for these weapons against strong and often contemptuous opposition, ensuring that America's best technology found its way from the laboratory to the battlefield.

Critics' Challenges. Critics in Congress of the Reagan military build-up challenged many weapons critical to the Gulf war effort. Former Senator Gary Hart, then Democrat from Colorado, claimed that the aircraft carriers now sending waves of planes over Iraq, and the battleships now launching volleys of *Tomahawk* cruise missiles against Baghdad, were obsolete. The M-1 *Abrams* tank – America's answer to Saddam's 5,000 Soviet tanks – was called "vulnerable" and a "questionable buy" by Representative Ron Dellums, the

Democrat from California. Dellums also charged that the top-of-the-line aircraft like the F-15 *Eagle* were "gold plated."[1] Military reformer Sheila Tobias in 1982 wrote of the F-15 that once in battle, "the confusion of mass combat [would] cancel out qualitative superiority."[2] The score in air-to-air combat so far in Iraq: 28 Iraqi planes downed, zero for the U.S. Who now can say that superior technology does not matter in battle?

Proven Worth. Many of the weapon systems once criticized already have proved their worth in combat against Iraq. Among these: *Patriot* anti-missile defenses against Iraqi *Scud* missile attacks; aircraft carriers from which thousands of air "sorties" have been launched over Iraq; and *Tomahawk* cruise missiles that have destroyed Iraqi command and control sites with pin-point accuracy from a distance of over 500 miles. Others such as the JSTARS airborne radar, which is designed to locate enemy armored forces, and the Army Tactical Missile System (ATACMS), which is a newly produced anti-armor missile system, are contributing to America's success against Iraq only months after an August 1990 House Armed Services Committee report recommended their cancellation. Other systems strongly criticized in the 1980s, including the *Apache* attack helicopter, the M-1 *Abrams* tank, *Bradley* infantry fighting vehicles, and *Maverick* anti-tank missiles, have not yet seen widespread use against Iraqi forces, but they likely will acquit themselves well once the ground war is joined.[3]

Reagan and Bush cannot take sole credit for these weapons. The research, development, and production for many of today's advanced systems began under Presidents Jimmy Carter, Gerald Ford, Richard Nixon, and even before. Yet Reagan and Bush provided the funding and the tireless political backing needed to get the new technology into the field, where today it is winning the war and protecting the lives of American GIs deployed in the Persian Gulf. In many ways the war against Iraq is the first real test of the Reagan and Bush military. The battle is far from over, but so far Reagan and Bush are passing with flying colors; their critics are flunking completely.

THE HERO OF THE GULF WAR: THE PATRIOT MISSILE

No weapon used so far in Operation Desert Storm has performed so surprisingly well as has the *Patriot* missile system. It is an anti-aircraft missile system first deployed in Europe in 1984. The system consists of an advanced phased-array radar for tracking targets in flight, canisters containing the missiles themselves (usually in blocks of four), and a launch, or "fire-control," center.

---

1 Congressman Ronald V. Dellums, *Defense Sense: The Search for a Rational Military Policy* (Cambridge, MA: Ballinger, 1983), pp. 147-157.

2 Sheila Tobias, et al., *What Kind of Guns Are They Buying For Your Butter?* (New York: William Morrow, 1982).

3 This *Backgrounder* will focus on systems already used in combat.

100 Percent Success Rate. In Operation Desert Storm, *Patriots* specially modified to shoot down missiles, not just aircraft, have seen combat for the first time. The *Patriot* has struck every one of the 34 *Scud* missiles against which it was fired, a 100 percent success rate. In some cases people were injured from falling debris after the *Scuds* were hit. The Iraqis have launched a total of 57 *Scuds* at both Israel and Saudi Arabia. The 23 remaining missiles were not intercepted either because the *Patriots* sent to Israel were not operational at the time of attack, or because the *Scuds* were flying toward unpopulated areas and intentionally were left alone. *Patriot* batteries were able to deflect a five-missile barrage against the allied airbase in Dhahran, Saudi Arabia, on January 20. This demonstrated the ability of the *Patriot* system to perform the technically difficult mission of intercepting several missiles simultaneously.

PATRIOT AIR DEFENSE SYSTEM

Missile length: 17 feet
Launch weight: 2,000 lbs
Warhead: 200 lbs. fragmentation
Propellant: solid fuel
Range: 43 miles
Radar: phased-array
First deployed: 1984
Initial mission: anti-aircraft
First tested against missiles: 1986

Source: *Jane's Weapons Systems 1987-88.*
Heritage InfoChart

In the 1980s there was strong congressional opposition to transforming the *Patriot* anti-aircraft missile into a weapon capable of destroying ballistic missiles in flight – precisely the mission it now serves in Israel and Saudi Arabia. The House Armed Services Committee on April 19, 1984, voted to slash funding for modifying the *Patriot* into a missile interceptor, reducing the Reagan Administration request of $92.3 million to $15 million.[4] The majority on the House Armed Services Committee voted on April 15, 1987, to delete all funds for testing the *Patriot* missile as an anti-missile system.[5] The Senate, however, approved funding for the program, which allowed it to go forward.

Saddam Hussein has used *Scud* missiles to terrorize the citizens of Israel and Saudi Arabia, and to attack U.S. forces in Saudi Arabia. If *Patriot* missiles in Israel and Saudi Arabia had not intercepted Iraqi *Scuds*, surely thousands more Israeli and Saudi men, women, and children would have died or been injured. The early *Scud* attacks on Israel, before the *Patriots* were deployed, injured scores of people and killed seven. If the *Patriot* had not been sent to Israel to protect Israeli citizens from *Scud* attacks, moreover, Israel surely would have been forced into the war. This could have splintered the anti-Iraq

4 U.S. House of Representatives, Committee on Armed Services, *Report on the Department of Defense Authorization Act, 1985*, 98th Cong., 2nd sess., H.Rpt. 98-691 (Washington, D.C.: GPO, 1984), p. 152.
5 U.S. House of Representatives, Committee on Armed Services, *Report on the Department of Defense Authorization Act, 1988 and 1989*, 100th Cong., 1st sess., H.Rpt. 100-58 (Washington, D.C.: GPO, 1987), p. 109.

coalition if other important members of the coalition opposing Iraq – including Egypt, Saudi Arabia, and Syria – did not want be seen as siding with Israel against another Arab country.

THE NAVY'S SILVER BULLET: THE TOMAHAWK CRUISE MISSILE

Over 250 *Tomahawk* cruise missiles have been launched against Iraq since the start of Operation Desert Storm. This is the first time this weapon has been used in combat. Cruise missiles are unmanned projectiles propelled by air-breathing engines and capable of sustained flight very close to the ground. These missiles have hit their targets (although not necessarily destroying them) 94 percent of the time. The *Tomahawks* used in Operation Desert Storm are armed with conventional high explosive warheads, although they can carry nuclear warheads. Military commanders typically fire cruise missiles against targets too well defended for manned bombers. Such targets include bunkers housing Iraqi political and military leaders. The first shot fired by U.S. forces in the Persian Gulf War was a *Tomahawk*.

TOMAHAWK SEA-LAUNCHED CRUISE MISSILE (conventionally-armed)

Length: 20 feet

Power: 600 lbs. thrust turbofan engine

Range: 775 miles (if launched from surface ship)

Speed: 550 miles per hour

Guidance: terrain contour matching/inertial

Warhead: conventional high explosive

Source: *Jane's Weapons Systems 1987-88.*

Heritage InfoChart

The *Tomahawk* program ran into congressional opposition in the early 1980s. The Senate Armed Services Committee in 1983 threatened to terminate the program.[6] The committee charged that the *Tomahawk* cost too much. Arms control considerations also prompted opposition to the cruise missile program. In the House, Representative Les Aspin, the Wisconsin Democrat who is now Chairman of the House Armed Services Committee, offered an amendment on May 31, 1984, blocking the deployment of nuclear-armed *Tomahawks*.[7] He claimed that nuclear-armed *Tomahawks* would hinder arms control agreements with the Soviets. A similar effort was made in the Senate by Republicans David Durenberger of Minnesota and Charles Mathias (now retired) of Maryland, on June 19 of the same year.[8] The sponsors wanted nuclear-armed *Tomahawks* banned through an agreement with the Soviets.

---

6 U.S. Senate, Committee on Armed Services, *Report on the Department of Defense Authorization Act, 1984*, 98th Cong., 1st sess., S.Rpt. 98-174 (Washington, D.C.: GPO, 1983), pp. 66-68.

7 *Congressional Record.*, May 31, 1984, p. H5049.

8 *Congressional Record.*, June 19, 1984, p. S7555.

Despite statements that it was not their aim to ban conventional *Tomahawks*, Mathias and the others endangered the entire *Tomahawk* program in trying to ban the nuclear missiles. Under any feasible arms control verification plan, it is virtually impossible to distinguish between nuclear and conventional cruise missiles. Thus any outright ban on nuclear *Tomahawks* would have generated political pressure to ban the conventional version as well. This is precisely what happened with the 1987 Intermediate-range Nuclear Forces (INF) Treaty, which banned all ground-based cruise missiles – conventional and nuclear – with ranges between 300 and 3,400 miles. The U.S. and the Soviets agreed to eliminate all ground-based cruise missiles because they could not be sure which were armed with nuclear and which with conventional warheads.

Follow-Up Killed. Even today Congress is trying to hamper cruise missile development. The logical follow-up to *Tomahawk*, the Long-Range Conventional Stand-Off Weapon, was opposed by the Senate Armed Services Committee in its report accompanying the fiscal 1991 Defense Authorization Bill. This program would design a long-range conventional cruise missile to be deployed on ships and airplanes. The Senate report charged that the long-range missile was a "...technology in search of a rationale."[9] The Department of Defense terminated the program in the fiscal 1992 budget.

Absent the *Tomahawk* cruise missile, Navy and Air Force pilots would have been forced to attack heavily defended bunkers housing the Iraqi military leadership. Cruise missiles can fly through dangerous air defense systems and destroy their targets with no risk to the lives of American pilots. Without cruise missiles, more American pilots would have been killed, wounded, or taken as prisoners of war. Fighting a war without cruise missiles also would have meant more expense to the American taxpayer. A *Tomahawk* cruise missile costs about $1.3 million. Losing an Air Force F-15 *Strike Eagle* attack aircraft to enemy fire would cost $50 million, while losing a Navy F/A-18 *Hornet* would cost $30 million. Finally, the highly accurate *Tomahawk* also results in fewer civilian deaths or injuries. Because it is so accurate – it can land within 50 feet of a target – it can strike precisely at military targets.

JSTARS RADAR SYSTEM DIRECTS PRECISION ALLIED BOMBING

Originally designed to meet an overwhelming Soviet armored threat in Central Europe, the Joint Surveillance Target Attack Radar System (JSTARS) was rushed to the Persian Gulf after performing well in tests in Europe last summer. Until the war against Iraq, it had not seen combat.

9 U.S. Senate, Committee on Armed Services, *Report on the Department of Defense Authorization Act, 1991*, 101st Cong., 2nd sess., S.Rpt. 101-384 (Washington, D.C.: GPO, 1991), p. 136.

JSTARS is a radar and information processing system for U.S. artillery, aircraft, and missiles. Installed on a modified Boeing 707 aircraft, it scans the ground day or night and in all weather seeking enemy tanks and armored personnel carriers (APCs) up to 56 miles away. Once it detects enemy tanks or APCs, it passes targeting information to U.S. artillery, aircraft, and missile commanders on the ground, enabling them to destroy them. It also can assess the damage caused by U.S. attacks. Since being brought into the Persian Gulf, JSTARS has helped to gauge the extent of damage caused by allied planes to enemy supply lines. It is probably also monitoring the location and movement of Iraqi tanks and armored vehicles.

JOINT SURVEILLANCE TARGET ATTACK RADAR SYSTEM

Mission: targeting and monitoring enemy armor

Airframe: modified Boeing 707

Radar coverage: 56 miles beyond frontlines

Source: Jane's Information Group.

Heritage InfoChart

The House Armed Services Committee voted in 1990 to terminate the JSTARS program. The August 3, 1990, committee report said: "The requirement for this system is unique to the U.S. European Command....Given the changes in Eastern Europe and the Soviet Union and the balancing of NATO/Warsaw Pact force ratios that will be driven by unilateral reductions, the requirement for JSTARS is no longer valid."[10]

The war with Iraq shows how wrong this assertion is. Saddam Hussein has 5,000 tanks and 8,000 armored personnel carriers, most of them the same Soviet-made weapons which JSTARS would have confronted in a war in Europe. If JSTARS were not available for Operation Desert Storm, the air campaign would have more trouble stopping Iraqi armored forces. The tanks and armored vehicles not destroyed in the air campaign would be used by Saddam against allied forces if a ground campaign begins.

Armored forces are the heart of the Iraqi military. If the air campaign fails to destroy large portions of these forces, a ground campaign is certain to be a bloody one. U.S. Army and Marine deaths in a ground campaign, under these circumstances, could easily run into the thousands. JSTARS not only can help reduce allied casualties, but help destroy Saddam's armored columns, making victory more likely.

---

10 U.S. House of Representatives, Committee on Armed Services, *Report of the Committee on Armed Services House of Representatives on the National Defense Authorization Act for Fiscal Year 1991*, 101st Cong., 2nd sess., H.Rept. 101-665 (Washington, D.C.: GPO, 1990), pp. 170-171.

NEW AIRCRAFT CARRIERS PROVIDE FIREPOWER

One of the most important high-technology weapons employed by U.S. troops in the Middle East are aircraft carriers. The U.S. has six aircraft carriers in the region supporting Operation Desert Storm, including the USS *America*, the USS *John F. Kennedy*, the USS *Midway*, the USS *Ranger*, the USS *Saratoga*, and the USS *Theodore Roosevelt*.

The attack and fighter aircraft based on these carriers, including A-6 *Intruder* bombers, F-14 *Tomcat* fighters, and F/A-18 *Hornet* fighter bombers, have played a major role in the air campaign that began on January 17. About one-third of all sorties flown in Operation Desert Storm have been flown by these carrier-based aircraft. Each carrier is launching about 150 aircraft per day. They have attacked such important strategic targets in Kuwait and Iraq as nuclear and chemical weapons production facilities, command and control centers, and airbases.

Despite its ability to project American air power worldwide, the aircraft carrier often has been the target of criticism in and out of Congress. Large carriers were derided as obsolete "sitting ducks" by Carter Administration Central Intelligence Agency Director Admiral Stansfield Turner and others. These critics urged that America deploy "smaller carriers." Yet the carriers that they advocated could not have handled the sophisticated, fixed-wing aircraft, such as F-14 *Tomcats* and F/A 18 *Hornets*, now flying missions over Kuwait and Iraq.

NIMITZ CLASS AIRCRAFT CARRIER

Displacement: 74,000 tons (unloaded)
Power: 2 water cooled nuclear reactors
Length: 1,092 feet
Speed: 30 knots
Number of aircraft: 80
Personnel: 5,900

Source: *Jane's Fighting Ships 1989-90.*

Heritage InfoChart

Representative Dellums offered an amendment to the fiscal 1983 Defense Authorization Bill on July 22, 1982, eliminating $6.9 billion for two aircraft carriers. While his amendment was defeated in the House by a vote of 303 to 83, Democratic Representatives Les AuCoin of Oregon, Don Edwards of California, Patricia Schroeder of Colorado, and Timothy Wirth of Colorado (now a Senator) voted for the amendment.[11] That year, too, former Senator Hart offered an amendment in the Senate to substitute smaller carriers for a large one. Senator Edward Kennedy of Massachusetts led an effort in the Senate Armed Services Committee in May 1987 to delete funds for the initial

11 *Congressional Record*, July 22, 1982, pp. H4515-H4522.

purchase of components, primarily for nuclear reactors, for two carriers. The Kennedy amendment failed.[12]

Making A Difference Early. Aircraft carriers have been critical to the Gulf operation from the day Iraq invaded Kuwait on August 2. Only large aircraft carriers could have delivered the airpower needed to deter Iraq from moving against Saudi Arabia last fall. While two squadrons of F-15 fighters were ordered to Saudi Arabia after the invasion of Kuwait, the bulk of U.S. airpower in the days after Saddam's invasion of Kuwait came from three aircraft carriers. If Iraqi forces had not been deterred from attacking Saudi Arabia, allied forces would have had to force their way into Saudi territory already partially occupied by Iraqi forces. This would have been a far more bloody operation than the war now underway. Aircraft carriers also enforce the embargo the United Nations imposed on Iraq. The effectiveness of the embargo has weakened Iraqi forces by cutting off war supplies imported to the country.

If Dellums, Kennedy, and the others who tried to block funding for aircraft carriers had been successful, U.S. forces would likely lack the firepower in the Middle East to pummel Saddam Hussein's forces. The U.S. Navy now has fourteen active aircraft carriers. If the Navy had cut back on carriers – Dellums believed six might be enough – it could not have spared the six carriers now used in Operation Desert Storm. Even if the U.S. had cut back to twelve carriers, Desert Storm would have been a tight squeeze, since three carriers now are in port for maintenance and overhauls. Only three would have been available to operate outside the Persian Gulf to patrol the entire Pacific, the Atlantic, and the Mediterranean. Normally, the U.S. stations three carriers in the Pacific, three in the Atlantic, and one or two in the Mediterranean. The Indian Ocean would have been left without carriers at all.

Fewer Carriers, Fewer Sorties. Rather than leaving so much of the world's oceans defenseless, the Navy likely would have dispatched fewer aircraft carriers to the Gulf War. Fewer aircraft carriers would have diminished U.S. airpower against Iraq. Thus, the air campaign against Iraq would have been less efficient and consumed more time because of the fewer allied aircraft available for combat. Example: with two fewer carriers in the Gulf, the U.S. would fly up to 300 fewer sorties a day. Fewer of Saddam's command and control centers in Iraq and Kuwait, fewer of the bridges he uses to resupply Iraqi troops in Kuwait and fewer of his forces in the field would be targeted each day. Without the extra carriers, Saddam's ground forces ultimately might have been able to mount a stronger defense of Kuwaiti territory.

---

12 Pat Towell, "Critical Showdown Over SDI Under Way on Capitol Hill," *Congressional Quarterly Weekly Report*, May 16, 1987, p. 980.

NEW MISSILE COULD BE A KEY PLAYER IN A GROUND CAMPAIGN

Another high-tech U.S. system that may prove critical in a ground war is the Army Tactical Missile System (ATACMS). ATACMS is an Army surface-to-surface missile designed to strike large concentrations of tanks and armored personnel carriers behind enemy lines. It is well-suited for countering Iraq, which has thousands of tanks and armored personnel carriers in southern Iraq and Kuwait. If the air campaign does not break Iraq's hold on Kuwait, a ground campaign will be necessary. Among the highest priorities in such an attack will be to destroy the armored forces not yet knocked out by the air war. The highly accurate ATACMS, armed with cluster bombs or special armor-piercing warheads that are deadly against armored forces, can destroy Iraq's armor before it threatens U.S. troops. The first ATACMS missile was fired against Iraqi forces on January 28, but the Army has not released a report on its performance.

ARMY TACTICAL MISSILE SYSTEM

Mission: destroying enemy armored forces

Type of missile: surface-to-surface ballistic

Range: 93 miles

Weight: 3,373 lbs.

Warheads: cluster, anti-armor

Source: Forecast International/DMS Market Intelligence Report.

Heritage InfoChart

The House Armed Services Committee, chaired by Representative Aspin, tried to kill the ATACMs program last year. The Committee reported on August 3 that the withdrawal of large portions of Soviet armored forces from Europe would eliminate the need for a system capable of "striking large concentrations of armored vehicles."[13] Iraq, with its over 5,000 tanks, has likely deployed armored systems in large numbers in Kuwait and southern Iraq. This is just the sort of force ATACMS is designed to counter.

There is no report yet how well ATACMS is doing in the field, but successful tests indicate that it will perform well. Critics took aim at the system because they said that it would not be needed, not because they claimed that it would not work. Saddam's armored war machine shows how wrong they are. If allied ground forces cannot destroy Iraqi armored forces with ATACMS, Iraq could better direct its armored forces to stop an allied ground attack. Free of ATACMS' fire, Saddam could better maneuver his tank forces to stop attempts by allied tanks to break through strongly defended Iraqi positions.

---

13 U.S. House of Representatives, Committee on Armed Services, *Report of the Committee on Armed Services House of Representatives on the National Defense Authorization Act for Fiscal Year 1991*, 101st Cong., 2nd sess., H.Rept. 101-665 (Washington, D.C.: GPO, 1990), p. 35.

CONCLUSION

America's success thus far in the war against Iraq is the result mainly of the bravery and tenacity of America's fighting forces. It also is the result of tireless efforts over the years by the White House, many members of Congress, U.S. Armed Forces, and American taxpayers to provide GIs with the best weapons the country can design. America managed to achieve this despite intensive debates about which weapons were best and how much should be spent on them.

Enduring Lessons. If Congress had reduced drastically the numbers of aircraft carriers, the U.S. would have lacked the airpower needed to stop Iraqi forces without leaving U.S. interests dangerously vulnerable elsewhere around the globe. Another lesson of the war is that missile defenses are crucial. Without the anti-missile *Patriot*, which the House Armed Services Committee tried to terminate in the mid-1980s, thousands of Israeli and Saudi civilians would have been victims of Saddam Hussein's *Scud* attacks. Other lessons: conventional cruise missiles are key weapons in the U.S. arsenal; and even if the Cold War ends, such advanced combat systems as the JSTARS airborne radar and the Army Tactical Missile System (ATACMS) are critical against enemy tanks, even those deployed by Third World foes.

Technology is the "force multiplier" that allows U.S. forces to shoot farther and more precisely than their enemies. The best always is expensive, but the price for deploying anything less ultimately will be paid in the lives of American soldiers, sailors, and airmen. This lesson will endure well after the fighting in the Persian Gulf ends.

Baker Spring
Policy Analyst