

Orion Scans Terrain From Kosovo to the Hindu Kush

Venerable P-3 Aircraft Increase Situational Awareness on the Battlefield

U.S. Navy P-3 squadrons participating

in Operation Enduring Freedom:

VP-9, VP-4, VP-1, VP-47, VP-8

U.S. Navy P-3 squadrons participating

in Operation Iraqi Freedom:

VP-46, VP-1, VP-40, VP-47, VP-8

By DAVID READE

The P-3 Orion maritime patrol aircraft (MPA) Hunting terrorists in the peaks of the Hindu Kush? Spotting for special operations troops in Iraq? Not the stereotypical MPA missions.

Not only has the Navy's front-line MPA been venturing far inland; it has been an indispensable surveillance platform in the global war on terrorism, a sensor and weapon platform that has impressed operational commanders with its high degree of utility and versatility.

The Aircraft Improvement Program (AIP, formerly Antisurface Improvement Program) version of the P-3C—which entered operational service in 1998 and has since been upgraded—is equipped with a mix of high-resolution

infrared imaging systems, longrange electro-optical video imaging systems, and both syntheticand inverse synthetic-aperture radars. The AIP P-3C created a new paradigm in 1999 during Operation Allied Force in Kosovo and Serbia, where P-3Cs on station in the Adriatic Sea cast the glance of their long-range electro-optical sensors far inland and launched AGM-84E SLAMs

(Standoff Land-Attack Missiles) against targets even farther afield.

Two years later, in the wake of 9/11, the AIP P-3C has emerged as a platform of choice for joint commanders to carry out multimission intelligence, surveillance, and reconnaissance (ISR) flights throughout the Persian Gulf area of operations. The wars in Afghanistan and Iraq since 9/11 have sealed the antisubmarine warfare aircraft's reputation as a valuable warfighting platform in unforeseen new ways.

Within days of the 9/11 attacks and the beginning of Operation Enduring Freedom (OEF), U.S. Navy P-3s already deployed in the Gulf region began surveillance missions to provide operational commanders a clearer picture of enemy positions within Afghanistan. This support was key to the success of the first air strikes and cruise-missile attacks launched by the United States and its coalition allies on 7 October 2001. Navy P-3Cs assigned to Patrol Squadron Nine (VP-9) also participated in the initial night of attacks, firing a number of SLAMs against Taliban and al Qaeda targets inside Afghanistan. A number of buildings and an SA-13 surface-to-air missile control center were hit by the SLAMs.

The Orions subsequently flew post-strike battle-damageassessment missions, giving operational commanders the

imagery needed to plan new strikes and/or re-strikes against the Taliban and al Qaeda positions. Once total air supremacy over Afghanistan had been established, on or about 17 October 2001, the P-3Cs began overland surveillance flights to give ground commanders a bird's eye view—day and night—of the terrain where special operations forces were operating to dislodge Tal-

iban and al Qaeda fighters from their mountainous hideouts.

During one of the more intensive actions, the battle for Tora Bora (December 2001), Orions provided real-time reconnaissance of cave complexes where enemy forces were hiding. The real-time imagery was transmitted to the operational commanders coordinating U.S. Air Force B-52 and fighter strikes on the caves along the rugged mountain sides.

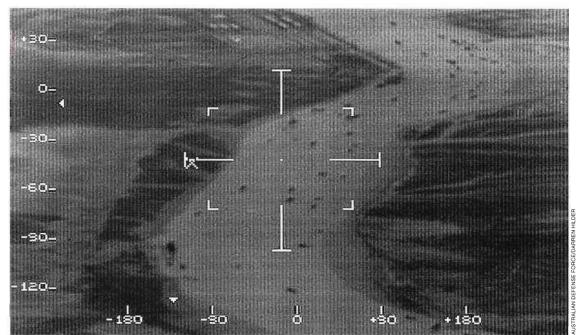
Simultaneously, P-3s also flew target-recognition missions

An AIP version of the P-3C—assigned to Navy Patrol Squadron One—takes off from a base in the Middle East for a mission in support of Operation Enduring Freedom.

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Electro-optical view from a P-3C of the Khor Abd 'Allah waterway in Iraq during Operation Iraqi Freedom.

in other regions of Afghanistan in an effort to locate senior al Qaeda members seeking to escape over the border into Pakistan.

Navy P-3s played a pivotal role in Operation Anaconda (March 2002), the largest in-country land battle to that date. Flying over the sharp ridges of the Shah-e-kot Valley in eastern Afghanistan, the P-3s carried U.S. Navy SEALs, who directed special operations forces (SOFs) on the ground during the ambushes and clashes with enemy fighters in the mountains. The P-3 crews used the aircraft's infrared sensors to pinpoint enemy al Qaeda troops in their heated cave hideouts and relayed information on the enemy positions to SOFs on the ground and strike aircraft overhead. The attacking aircraft would in turn drop-skip bombs off the mountain sides to penetrate the cave entrances. Some of the Orions carried their own SLAM and Maverick Missiles to provide additional firepower.

The mountain-warfare operations required extra vigilance on the part of the P-3 crews, who had to avoid collisions with the high terrain while at the same time maintaining the prescribed safe standoff distances from enemy air defenses.

P-3Cs also provided over-the-hill reconnaissance for SOF troops, a mission that required looking to see what was waiting on the other side of ridges as the SOFs were scaling the steep mountain sides.

Although the RQ-1 and MQ-1 Predator unmanned aerial vehicles received considerable media attention as the principal surveillance aircraft over Afghanistan, their live video feeds—likened to "looking through a soda straw," in the words of one analyst—were transmitted to headquarters hundreds of miles from the scene of battle but were not available to troops at the scene. In contrast, video from the Orions was downlinked directly to ground forces in real time, enabling troops to react more rapidly to a changing tactical situation.

Although the intensity of combat operations inside Afghanistan has declined significantly, P-3Cs are continuing ISR missions over the countryside in support of U.S. and British forces. The latest missions included Operation Snipe, in which British commandos worked in close coordination with Pakistani troops along the Pakistani border to eliminate al Qaeda and Taliban fugitives and to locate their secret sanctuaries.

P-3Cs also provided ISR support for Operation Mongoose, in which the U.S. Army's 82nd Airborne Division searched and cleared caves in the Adi Ghar mountains while fending off enemy attacks. Similar support was provided in a sweep of the Sami Ghar mountains, where large caches of rocket-propelled grenades, anti-tank mines, and mortars were found.

During Operation Desert Lion, P-3s supported air assaults by the 505th Army Parachute Regiment in the mountains of northeastern Afghanistan, where a number of enemy guerrillas were killed and large caches of weapons were found.

On another mission, during Operation Eagle Fury in Bamiyan Province in the central mountains, 15 Taliban fighters were captured by U.S. forces.

P-3Cs supported more than 300 U.S. SOFs in the fighting in and around Spin Boldak in southern Afghanistan, the largest combat action in Afghanistan since Operation Anaconda last year. In Spin Boldak, U.S. forces located a large contingent of rebel fighters and, in a major cave complex, found supplies including ammunition, fuel, food, water, and blankets as well as some mules.

Another new mission that earned the Navy P-3 units additional acclaim from the operational commanders in Afghanistan was force protection. When Marine Expeditionary Units arrived in-country in late 2001 and set up their forward operating bases—Camp Rhino near Kandahar, for example,—the Orions provided real-time overhead imagery of terrain beyond the camp perimeter that allowed the Marines to see well beyond their positions and to receive early warning of attacks by the Taliban forces.

A more traditional MPA role—maritime surveillance—was neither forgotten nor neglected. Orions continued to protect the Navy's forward-deployed carrier strike groups from the

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potential threats posed by submarines and fast-attack suicide boats. The MPA also conducted Maritime Interdiction Operations (MIOs) in the Persian Gulf and Arabian Sea to detect, investigate, and target—for interdiction by surface combatants—suspicious looking non-military vessels. On one occasion, several small boats located by MPA were stopped and several fugitive senior al Qaeda members were found.

Operation Iraqi Freedom

In the months and weeks leading up to Operation Iraqi Freedom, Navy and coalition MPA stepped up pressure on Iraqi's maritime commerce in the northern Persian Gulf. Navy P-3s doubled their MIO missions to stem the flow of illegal cargoes of contraband oil and dates—pound for pound worth more than oil—that have been used to fund terrorist organizations.

The P-3s located and tracked hundreds of vessels suspected of smuggling and/or of laying sea mines. They also provided real-time imagery of the area in and along the coast of Iraq and up the country's inland waterways toward the port of Umm Qasr, gathering intelligence on Iraqi troop positions, military installations, and Silkworm coastal-defense missile sites.

Late in the day on Thursday, 20 March, after the coaliton's precision decapitation attacks on the Iraqi regime had been launched, the I Marine Expeditionary Force (I MEF) crossed over the Iraqi border with Kuwait and began what later would be described as a "steel wave" advance through southern Iraq toward Baghdad. Orions—15,000 feet above that steel wave—provided unit force protection to the MEF to support the speedy dash north.

Navy P-3s provided the Marines with real-time reconnaissance—pioneered in the OEF operations in Afghanistan of terrain and enemy activity in the darkness beyond their moving positions. The P-3s also provided real-time situational awareness of the battlefield—an advantage sorely lacking in the first Gulf War—that significantly facilitated the Marines' rush across the desert.

As the Marines pushed on, the high flying P-3s continued to report on the Iraqi forces ahead, provided targeting information which the Marines used to attack enemy positions both with artillery and with bombs launched from strike aircraft. The Orions pinpointed the positions of a number of Iraqi armored tanks and vehicles lying in wait, as well as key bridges that the Marines were able to take before they could be destroyed by Iraqi troops. As I MEF approached Baghdad, the Orions reconnoitered a number of military bases and airfields ringing the city.

In other OIF combat operations, P-3s supported SOFs in commando raids on the Kaabot and Mabot oil terminal platforms in the Northern Persian Gulf, and an air assault on an associated oil pumping terminal at the tip of the Al Faw Peninsula. Securing the platforms was deemed critical by the coalition to prevent Iraqi sabotage much like that perpetrated by the Saddam Hussein regime in the first Gulf War (1990-91) on these same facilities, causing an unprecedented ecological disaster in the Persian Gulf.

P-3s initially provided reconnaissance of the oil facilities and platforms, then transmitted real-time surveillance video of the operation—conducted by SEALs and Royal Marines—

back to operational commanders in their headquarters. The SOFs secured the oil platforms—which had already, in fact, been rigged for sabotage—and neutralized the Iraqi forces at the pumping facility.

During the operation to secure the oil facilities, one P-3 detected and identified a number of Iraqi naval patrol boats in the vicinity. The boats were suspected of laying sea mines in the approaches to the Al Faw Peninsula and the port of Umm Qasr. In a successful joint operation, the P-3 tracked the boats throughout the commando raid and passed targeting data to



Aviation Warfare Systems Operator First Class John Clark—assigned to Patrol Squadron One—monitors contacts with the Airborne Integrated Multispectral Sensor system on board a P-3C MPA during operation Enduring Freedom.

an Air Force AC-130 gunship, which destroyed the boats.

Orions supported other SOFs and Marine units farther inland in an operation to secure the Ramallah oil fields in southern Iraq. During initial reconnaissance of the Ramallah fields, P-3 crews detected a number of oil wells already on fire. Marines were immediately dispatched to secure the oil fields. The Orion's real-time video was transmitted back to the combat commanders who were monitoring the operation and evaluating the impact on the environment caused by the burning wells.

The sophisticated sensors and data links installed in the AIP P-3C—combined with their imaginative employment in such new roles as the direct support of SOFs—give operational commanders a new platform of exceptional utility. The lessons learned—in both Afghanistan and Iraq—will be used in the Multimission Maritime Aircraft program, which is designed to replace the current P-3. Maintaining the several new capabilities developed in OEF and OIF will give field commanders in future operations a flexible new platform that will help them to cut through the fog of war.

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