

# The National Defense Council Foundation

## *Issue Alert*

### *DEVELOPING ANWR: A NATIONAL SECURITY IMPERATIVE*

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#### **INTRODUCTION**

Oil is the lifeblood of both the American economy and its military establishment. Indeed, it would be difficult to imagine a commodity that has had such a pervasive impact on virtually every area of human endeavor. From transportation to medicine, from agriculture to manufacturing, oil remains an essential element. While most people take oil for granted, like the air that they breathe, its absence is soon noted. Yet, today, as never before in American history, access to this vital commodity is growing increasingly tenuous.

The consequences of our continuing reliance on imported oil cut across all sectors of the economy and impose an enormous economic penalty. Moreover, the evolving global threat environment makes U.S. import dependence more than just an economic issue, but rather, an issue with critical implications for national defense. Indeed, the reality of the 21<sup>st</sup> Century battlefield is one in which military operations will be fundamentally transformed. No longer will combat take place along fixed and predictable fronts, but rather will occur almost anywhere and without warning. This will require a military capability characterized by flexibility, mobility and responsiveness. Implicit in these new characteristics is the need to have sufficient energy supplies to accommodate the vastly increased fuel expenditures they will require. Therefore addressing America's continued need for imported crude oil and refined petroleum products is a priority that requires urgent attention.

To understand the extent of the potential need, it is necessary to understand the way in which America's military establishment is being transformed and the threats it is likely to encounter.

#### **DEFENSE TRANSFORMATION AND ENERGY SECURITY**

With the demise of the Soviet Empire and its characteristic bipolar threat environment, it was necessary for the Department of Defense to develop a doctrine that took into account the new global threat environment.

In FM 100-5, its statement of doctrine, the United States Army succinctly described the problem:

*“The global realities of today are in a period of significant change. Army forces may find themselves called upon to fight under conditions of rapid force projection, that can build to major sustained operations in war and peace or that can terminate quickly only to lead to other commitments elsewhere.” (1)*

The recent experience in the Global War on Terrorism in which operation Enduring Freedom saw military operations rise to a peak and then subside only to be followed by Operation Iraqi Freedom is a testament to the validity of this concept.

In order to accommodate the needs of the new global threat environment the Department of Defense has been developing a doctrine called *“Rapid Decisive Operations,”* or *“RDO.”* A central element of this doctrine is that *“Speed must be both absolute and relative to the adversary.”* (2) To achieve that speed, in the future, the force must be mobile and flexible on a radically changed global threat landscape. As the RDO white paper notes:

*“We can no longer plan on having months or even weeks to deploy massive theater forces into a region rich in unthreatened infrastructure, while delaying offensive action until favorable force ratios have been achieved. Instead we must plan to engage in the first few hours of the crisis with those capabilities that can be brought to bear quickly, informed by intimate knowledge of the adversary and focused on those objectives most likely to produce the desired effects.” (3)*

Even as implementing RDO places new requirements for speed and mobility on our forces, it will also create an enormous new logistical requirement on those responsible for supply the force.

## **EVOLVING FUEL REQUIREMENTS**

Speed and mobility have always been an important strategic element in modern warfare. During the American Civil War General Nathan Bedford Forrest said that the key to victory was to *“Get there first with the most.”* That dictum remains valid today.

But achieving the amount of speed and flexibility envisioned by RDO will require substantially increased amounts of fuel, both to transport our forces and to operate them once they arrive in theater. This increased fuel requirement is not a new factor. Rather it is a continuation of a trend that has been in place since the advent of mechanized warfare in World War II.

To illustrate:

- A contemporary U.S. Army Heavy Armored Division comprised of 17,500 soldiers uses roughly twice as much fuel on a daily basis as two World War II field armies. (4)

- During Operation Desert Storm, the 582,000 U.S. forces deployed to the Middle East consumed over 450,000 barrels of oil per day, more than twice as much as the entire 2 million-man Allied Expeditionary Force that liberated Europe in World War II. (5)

Moreover, the military's requirements continue to grow.

During Operation Iraqi Freedom (OIF), the fuel requirement per deployed soldier increased by almost 23.1% from Operation Desert Storm requirements. (6) In the years ahead this figure will grow even more.

## **THE STRYKER BRIGADE COMBAT TEAM**

As part of the effort to address the new global threat environment, the Department of Defense is undergoing a process of force restructuring. Called "*Defense Transformation*," the process is looking to create a new, more mobile and more flexible force that can be tailored to the mission at hand. A key element of *Defense Transformation* is the creation of the *Stryker Brigade Combat Teams*, or *SBCTs*, that will serve as a template for the future.

What makes the *SBCTs* unique is their self-contained nature. In addition to three infantry battalions, they also include a cavalry squadron, a field artillery battalion, a military intelligence company, an engineer company and signal and anti-tank companies. As integrated units, the *SBCTs* can be deployed independently and tailored to mission requirements.

Each 3,900 man brigade will be equipped with over 300 Stryker combat vehicles as well as 1,200 additional trucks, utility vehicles and support equipment. Deploying the 14,663 tons of supplies and equipment and 3,900 military personnel that comprise a Stryker Brigade Combat Team will require flying 243 C-17 sorties. (7) Moreover, once deployed, an *SBCT* will also require an initial fuel load of at least 160,000 gallons. (8)

While the *SBCT* exemplifies the type of unit that will be required to defend America in the new global threat environment, it also underscores the critical role fuel will play as a military commodity on the 21<sup>st</sup> Century battlefield, because the new capability carries with it an intangible cost: higher fuel requirements. But the question is where will the fuel come from?

## **THE CURRENT IMPORT SITUATION**

In 1973 at the time of the Arab Oil Embargo, the United States was importing 34.5% of its crude oil and refined petroleum products with 4.9% of our oil supplies coming from the Persian Gulf. (9) Despite the clear warning to reduce imports implicit in the Embargo and its consequences, nothing has been done. As a result, today, over 60% of our crude oil and refined products are imported, with 11.5% of domestic consumption accounted for by oil from the Persian Gulf. (10)

Yet, it is not just imports per se that are at issue. Of even greater concern is the fact that a substantial portion of the oil we import comes from nations that are unreliable suppliers. Specifically, four of the top six sources of U.S. imports, Saudi Arabia, Venezuela, Nigeria and Iraq cannot be considered secure sources of supply. Together these four nations provide 40.5% of U.S. imports and account for 24% of domestic oil consumption. (11)

Terrorism, domestic unrest and hostility to the United States all contribute to their questionable reliability.

In the case of Saudi Arabia, there has been rising hostility against the United States, and a growing al-Qaeda presence. In addition serious doubts have been raised concerning the ability of the Saudis to surge production in times of need. Since they are the only country believed to have significant “surge” capability, this means that there may be no surplus production available. In Venezuela, the current government is openly hostile to America and has even threatened to cut off oil exports. In Nigeria, ethnic unrest and lawlessness are currently causing the loss of 135,000 barrels of crude oil per day. (12) In Iraq, insurgents have targeted oil pipelines and production facilities as a key element of their strategy. (13)

## **COMPETITION FOR SUPPLIES**

Even nations we consider secure sources of supply such as Canada and Mexico may no longer be as reliable as once thought. Because of their proximity, the prevailing view has long been that the U.S. would have first call on oil production from its near neighbors. Yet, overtures by China now call that assumption into question.

The Chinese economy has been growing at between 9% and 10% for more than a decade. (14) As a result, its demand for oil has grown accordingly. Unable to provide for its oil needs from domestic sources, China has become an ever-larger factor in the world oil market, most recently accounting for 40% of the total increase in global oil demand. (15)

To meet its burgeoning thirst for oil, China has sought to make inroads with traditional U.S. suppliers such as Mexico, Canada and Venezuela by offering large amounts of capital investment to help develop their resources. China is already operating two oil fields in Venezuela and has proposed a multi-billion dollar investment in Canadian tar sands. (16) More recently, the Chinese National Oil Company made an \$18.5 Billion tender offer for the U.S. oil giant UNOCAL. (17) As a result, of China’s increasingly aggressive moves into the world oil market import sources once believed a last resort in times of crisis may no longer be assured.

## **FINDING FUEL FOR THE FUTURE**

One of the ironies of America’s current oil import dependence and the vulnerability it creates for our Armed Forces is that the United States does not suffer from a shortage of energy resources. The U.S. has over 275 million tons of recoverable coal reserves; (18)

U.S. oil shale reserves are equal to 2 Trillion barrels of oil, and it has 189 trillion cubic feet of conventional natural gas reserves. (19) Most important, in addition to these long-term options, it also has anywhere from 10.4 billion barrels to as much as 30 billion barrels of recoverable oil reserves in the Arctic Wildlife Refuge in the northern reaches of Alaska. (20) The benefits of developing these resources on America's import vulnerability and its national security cannot be overestimated.

Once in production, it is expected that ANWR could produce as much as 1.5 million barrels per day of oil for up to 30 years. To put this in perspective, this is nearly as much oil as we import from Saudi Arabia. Further, it is enough to provide for **ALL** defense needs for up to 90 years.

What makes this capability so important is that no matter what happens in the civilian motor fuel market, there will be a military need for conventional fuels for the foreseeable future.

While civilian vehicles have an average service life of 16.8 years, most tactical systems used by the military have service lives at least twice as long. (21) For example, the Abrams tank is now 25 years old, and the HUMVEE is marking its 20<sup>th</sup> year of service. The B-52 is now 54 years old, and the C-130 has now been in service 50 years. (22) The same is true of our naval vessels, which, with the exception of aircraft carriers and nuclear submarines also require oil as a fuel. Further, even nuclear powered aircraft carriers are of little value if their aircraft do not have petroleum-based fuels to fly.

But providing a needed boost in domestic crude oil production is not the only security benefit that will result from developing ANWR's oil resources.

### **OTHER BENEFITS FROM ANWR**

One of the major concerns regarding America's oil import vulnerability is the lack of refining capacity. Crude oil must be refined into other products before it can be used. However no new refineries have been built in the United States for three decades. This lack of refining capacity could be significantly aggravated if the flow of oil from Alaska were allowed to substantially decline. Many refineries operated on the West Coast were specifically configured to process Alaskan crude, and would either require substantial renovation or be unable to operate if crude of that type and grade were unavailable. By developing ANWR's resources the prospect of increased refined product imports could be reduced.

A second point is that the Trans-Alaska Pipeline System (TAPS) that currently brings crude oil from the North Slope south to Valdez for shipment to the lower 48 states requires a minimum throughput of around 325,000 barrels per day to operate. If the flow drops significantly below that figure, the flow could cease and it would be difficult if not impossible to restore operations. This would leave the remaining production capability of the North Slope's oil fields – as much as 325,000 barrels per day – with no means of getting to Valdez. In essence our nation would be abandoning several billion barrels of

recoverable oil. Developing ANWR would eliminate this prospect, assuring a continued flow and extending the useful life of the TAPS pipeline significantly.

A final benefit would be the creation of hundreds of thousands of jobs, not just in the Alaska, but in the lower 48 states as well, producing equipment and refining and distributing Alaskan crude.

## **CONCLUSION**

In an era of declining global oil supplies and increasing competition for what oil is available, and uncertain security, development of the oil supplies on Alaska's Arctic Coastal Plain is one of the few actions that can provide near-term, concrete relief to America's import problem. As such, it must be considered an urgent national priority.

## **NOTES**

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