THE SECRETARY OF THE NAVY
WASHINGTON DC 20350-1000

July 27, 2012

The Honorable James M. Inhofe
United States Senate
Washington, DC 20510-3603

Dear Senator Inhofe:

Thank you for your letter of July 24, 2012, concerning the Navy's Great Green Fleet demonstration. It was a very successful test of advanced bio-fuel used in an operational setting.

I take seriously your concern about the impact of the demonstration on the Department of the Navy's budget. The cost of the demonstration, described in the summary enclosed, will have no impact on the Navy's near and long term readiness. The real threat to our readiness and our budget is not in the Navy's pursuit of alternative fuels; it is in our vulnerability to the rapid and unforeseen changes in the price of oil. A $1 change in the price of a barrel of oil, for example, results in an approximately $30 million change in the Navy's budget. This year, the Navy will spend more than $500 million in additional fuel costs because of these rapid changes in price.

As you pointed out in your correspondence, the Defense Logistics Agency (DLA) purchased 450,000 gallons of "neat" or unblended biofuel for the demonstration. Although the biofuel purchase was significant because of its size relative to previous purchases for testing, it is only four-one hundreds of one percent of the Department's annual fuel purchase. The cost for the biofuel, $12 million, is equivalent to the cost to the Department when the price of a barrel of oil goes up just 40 cents. I do not discount the resistance you and others have expressed to the prospect of the Navy making bulk purchases of biofuel at today's prices; in fact, I share it. That is why we will not purchase biofuel for operational use unless it is cost competitive with petroleum. We cannot afford to do it, and we will not do it.

I am, however, optimistic about our country's prospects for producing advanced, drop-in biofuel that is affordable, that is capable of competing against oil in the global market, and most importantly for our national and economic security, that is homegrown. I believe the Navy can help advance a viable domestic market because we can bring demand, but also because energy transformation is part of our history. The Navy has always led in changing energy sources and energy innovation. In the middle of the 19th century we transitioned from sail to coal-fired steam power; a half-century later we

upgraded from coal to the more energy-dense oil. In the 1950s the Department revolutionized the concept of transportation power when it added nuclear to the Fleet.

Today, advanced biofuel does cost more than petroleum. It is a new technology, which is not yet produced at scale, and the demand is still building. But if cost prevented us from developing alternative sources of power, we would still be using sails. We would have never built nuclear submarines and we would not be building them today because they are still more expensive than conventional submarines.

I am concerned, as I know you are, about our country's reliance on foreign oil and its potential to impact our readiness. Working to accelerate a viable alternative to foreign oil addresses this concern. As a proponent of an "all of the above strategy" on energy development, I want to assure you that the U.S. Navy does not have a favorite among the potential alternatives. I support testing and use of any viable fuel sources that are truly "drop-in" replacements and require no modifications to our platforms, that do not compete with food production, is produced in America, and meets the requirements under the law as stated in the Energy Security and Independency Act Section 526.

I trust the information provides answers to your questions, and I look forward to continuing our discussion about improving the Navy and the nation's energy security.

Sincerely,

Ray Mabus

Enclosure:
As stated

DEPARTMENT OF DEFENSE
INFORMATION PAPER

SERVICE/AGENCY: U. S. NAVY
SUBJECT: Navy Energy Program
DATE: 27 July 2012

RESPONSE: As reported, 100,000 gallons of HRJ-5 advanced biofuel and 350,000 gallons of HRD-76 advanced biofuel were purchased from Louisiana-based Dynamic Fuels LLC, Dynamic Fuels, LLC, a joint-venture of Tyson Foods, Inc.; and Syntroleum Corporation, and algae, produced by Solazyme, for $12,037,500. The transportation and distribution of the advanced biofuels cost $792,112. These costs are incurred now because the biofuel is not fully certified. They would be eliminated from operational purchases of advanced biofuel/fossil fuel blends that will use normal distribution and logistics infrastructure for fuel.

Operations and Maintenance Navy (O&M,N) funds were used to purchase fuel for this demonstration because the testing and evaluation was performed in an operational setting. The funding source was recommended by U.S. Navy's legal counsel.

Testing activities that included test plan development, test support, and data review and analysis cost $100,690 in research, development, testing and evaluation (RDT&E) funds.

Decals for the aircraft cost $1,400 across nine commands and required 32 man-hours total to apply. Green Langley stripes for the aircraft cost $201.17 for 5 gallons of paint and required 55 man-hours to apply.

The U.S. Navy incurred no other costs for visitor participation. Every visitor who participates in a carrier embark pays either $25 (daylight visit) or $50 (overnight visit) to cover costs of their visit, which include food, a group photo, and an embroidered ball cap. The ball caps cost the visitors $10 each. NIMITZ safety ball caps are green and the ship's tailor embroidered "Great Green Fleet" on 10 of them. VAW 117 had GGF T-shirts made to be sold, not given away, to the ship's crew and guests.

The COD flights incurred no additional cost because the price of the biofuel is already accounted for and there were no additional flying hours needed because COD flights for visitors, press and supplies occur regularly during RIMPAC.