SDI ensures our retaliation

To the Editor:

I find a pressing need to correct some of the falsehoods and flawed reasoning in Alan Szarawarski’s guest column (“SDI is impractical and fatally flawed,” Oct. 16). Szarawarski notes that the head of SDI, General Abrahamovich, “does not deny that a 100 percent effective missile defense is possible”; then he follows by declaring himself that “an SDI system that is 98 percent effective will not prevent the destruction of the United States in a nuclear war.

The point of SDI is not to guarantee that no warheads will hit their targets in a Soviet first strike. Rather, the intention is that a high percentage of a Soviet strike would ensure that most of our retaliatory force would survive, so the Soviets would realize that attacking the United States would be suicidal. In short, the intention is to make the Russians realize that they cannot carry out a successful preemptive first strike, and so they will not attack, nor will they be in a position to blackmail the United States.

Szarawarski’s next claim is that “SDI is only effective against ICBMs,” leaving the United States “vulnerable to attack by submarine-launched missiles and cruise missiles.” Are we to believe that SDI defends only against some missiles and not others, and that therefore SDI is inappropriately used? Such an implication would be ridiculous; we need different defenses against different offenses.

To reject SDI on the grounds that it cannot defend us from all kinds of enemy missiles would be as ridiculous as rejecting submarines on the grounds that they cannot stop a land invasion.

Having discussed the implications, let us return to the initial claim, that SDI would leave us vulnerable to submarine-launched missiles. Only a fraction of the SDI satellites will be over the Soviet Union at a time (SDI satellites will not be in geosynchronous orbit). At any time, most of the satellites will be over oceans, watching for launches from Soviet submarines.

The satellites can shoot down sub-launched missiles like ICBMs. While the flight time may be shorter, our satellites would still detect the missiles within seconds and the laser beams travel at the speed of light, so even while the flight time is just a few minutes instead of around half an hour (ICBMs), we should still get them.

Further, submarines cannot launch all their missiles at once, making it easier for our defense since we can shoot them down one at a time. Also, sub-launched missiles generally travel slower than ICBMs, making it easier to track and destroy them.

As for cruise missiles, it is important to note that these travel at speeds in the hundreds of miles per hour, many times slower than ICBMs (10,000 mph), making them much easier to track. It can be argued that cruise missiles may hide under clouds; however, it is unlikely that they would benefit from cloud cover for their whole flight.

Szarawarski argues that the Soviets will develop countermeasures such as building more missiles. This time he assumes only a 75 percent effective defense, so the Russians only need to quadruple their missile force to achieve the same number of hits. Surprisingly, Szarawarski fails to make the argument that they would not need a full four times the offense since the extra load on our system may reduce its percent effectiveness. Nevertheless, 75 percent effectiveness is a conservative estimate, so let’s analyze his proposal.

What would it cost the Soviets to quadruple their arsenal? Their current missile force costs about half a trillion dollars; quadrupling the arsenal would cost approximately $1.5 trillion. Though we do not know exactly what an SDI system would cost, reasonable estimates are far lower.

Where does Szarawarski get the notion that the United States will spend a trillion dollars on a 75 percent effective system, and the Soviets could quadruple their arsenal for less? Other countermeasures he suggests.

(Please turn to page 8)