U.S. manned space-flight headquarters to be in Virginia

by Joyce Fredman

The third in a series of EIR *surveys of state-level production capabilities shows the SDI and space-related potential of Virginia.*

The new manned space station which is being planned by NASA will have its management headquarters located in Reston, Virginia, only a short distance from the nation's capital. Aside from its own workforce, this means numerous corporations such as Lockheed, Boeing, and TRW will most likely set up some sort of offices nearby. Along with the new shuttle museum planned for Dulles International Airport, the whole Northern Virginia corridor could go from hotels and shopping malls to a center of science.

The SDI

One of the most important aspects of an economic overhaul of the state of Virginia is the impact of the Strategic Defense Initiative, both in its own right, and as a driver for many spin-off industries.

An important consideration for the impact of the SDI in Virginia is the large number of high-priority military targets in this region. Military facilities alone cover some 450 square miles: the Pentagon, the Administrative Center of the Department of Defense (Arlington), Norfolk Naval Base, Quantico Marine Base, Langley Air Force Base, and the Coast Guard, not to mention the Capital, Dulles International Airport, Newport News shipyard, NATO's United States headquarters command, and the Federal Aviation Administration station.

In the immediate term, a ground-based anti-missile- missile capability is needed, which would continue to be a permanent feature of SDI for some time. The exciting feature of the SDI program is that within two days of the announcement of a commitment to its full-scale implementation on a crash basis, the impact would be felt throughout the state and nation. The program necessitates that capital goods industries expand to produce the most advanced possible equipment and systems, and do so within a specific time-frame. The very initiation of such a program sends the entire nation's economy into a capital investment boom that increases the amount of capital equipment available per industrial operative. This is the "Manhattan Project" approach: an off-budget operation, totally detached from the Office of Management and Budget and other such bureaucratic constraints. This means a huge upsurge in mining, manufacturing, construction, and utilities, as technology developed by previous programs, but not yet implemented, is infused into the economy.

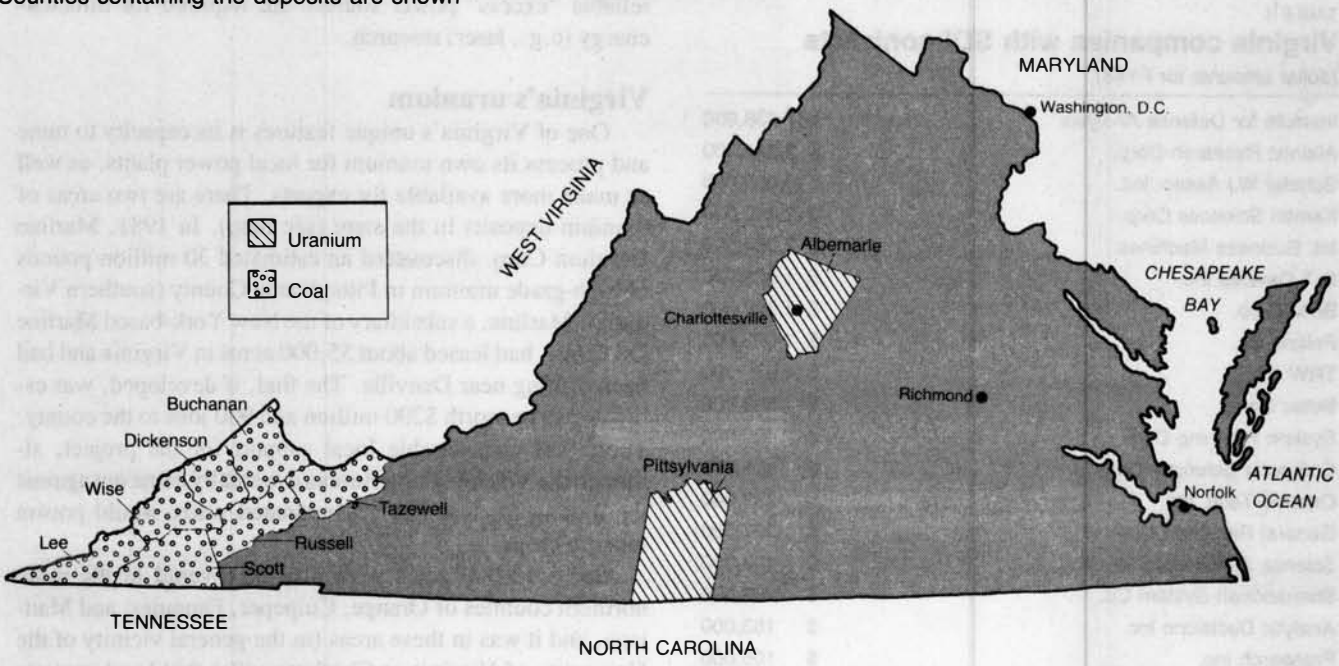
For many, the SDI means more silicon chips, more teflon, and the vision of so-called "Beltway Bandits" chomping at the bit for high-tech contracts. Even though there indeed will be effects of this nature, the guts of the program and its economic impact are something much more profound and much more durable—rooted in American System economics. This is a program, subsumed under a Moon-Mars project, which lifts Man's eyes to the stars. It is a program which also raises living standards around the globe. It represents economic activity in its noblest moment—man organizing his universe at the highest level.

An SDI fleet

In Virginia, the shipyards of Newport News and Norfolk could quadruple their output and lead the country into a 21st-century defense, building an "SDI-dedicated fleet." The most obvious requirement is the ballistic missile submarines that could launch pop-up x-ray lasers and mirrors into space. What is also required for the SDI is a general fleet buildup. At present, the United States has a minimal anti-submarine warfare capability. For this, two types of vessels are needed: attack submarines, which would pursue enemy submarines carrying ballistic missiles; and missile-carrying surface ships, which attack enemy submarines sighted by aircraft or located by sonar. Since submarines take several years to complete, their construction must begin immediately.

A large hidden-redundant launch capability is also a critical feature. In Virginia's case, this would mean an underwater missile-launch facility.

Uranium and major coal regions in Virginia
Counties containing the deposits are shown



The construction of these means not only a gear-up of the shipbuilding facilities of Virginia, but of the total infrastructure of the state. The productive manpower needed for such a program means a demand for advanced education, access to quality health care, high nutrition, and living standards.

Infrastructure must be upgraded. The state's 65,000 miles of streets and highways will have to be improved to handle larger traffic flows. Currently, there are 13,000 urban, 52,500 rural, and 1,024 interstate miles; the interstate and urban systems must be rapidly improved and expanded. Here is where the construction industry will be immediately affected. Thousands of jobs could be opened up and new contracts issued right away.

Power for the project

In order to power such an effort, the state must have a clear and stated commitment to maximum energy-producing capabilities, with no homage to the conservationists. Where does the state's energy program stand currently? The problems involved in Virginia's energy policy are indicative of the backward national trends acclimatized to a cultural pessimism nurtured in an economy which considers progress passé.

Virginia's electricity production breaks down as follows, in kilowatt-hours: hydroelectric—818 million; fossil fuel—18.9 billion; nuclear—22.3 billion.

Virginia Power, which provides electricity for 60% of the state's land area and 80% of the population, is an example worth noting. Presently, there are only two nuclear power plants. One is in Surry, and has a capacity of 1,830 megawatts; the other is in North Anna at Lake Anna, and has a capacity of 1,562 megawatts. They provide 22 billion kilowatt-hours/year, approximately 50% of Virginia Power's electricity.

When asked about future plans for nuclear plants, spokesmen said there absolutely weren't any. In fact, four nuclear units that had previously been planned have been cancelled: two at Surry in the late 1970s, and two more at North Anna in the early 1980s. Why? Because now "the trend" is to build smaller non-nuclear units with shorter lead time, approximately two years, such as the combined cycle unit planned at Chesterfield. It will have a capacity of 205 megawatts and use natural gas or coal. Virginia Power argues that the 10-year lead time and initial capital investment required for nuclear plants is no longer justified economically, as population is not growing at a fast enough rate, nor is an industrial capacity developing at rates comparable to earlier times.

Under these circumstances, there appears to be a virtual glut of energy.

Nuclear is not the only power source being passed by. Even hydroelectric power is being reevaluated. Hydroelectric now provides for approximately 5% of the state's energy, while fossil fuel accounts for 45%.

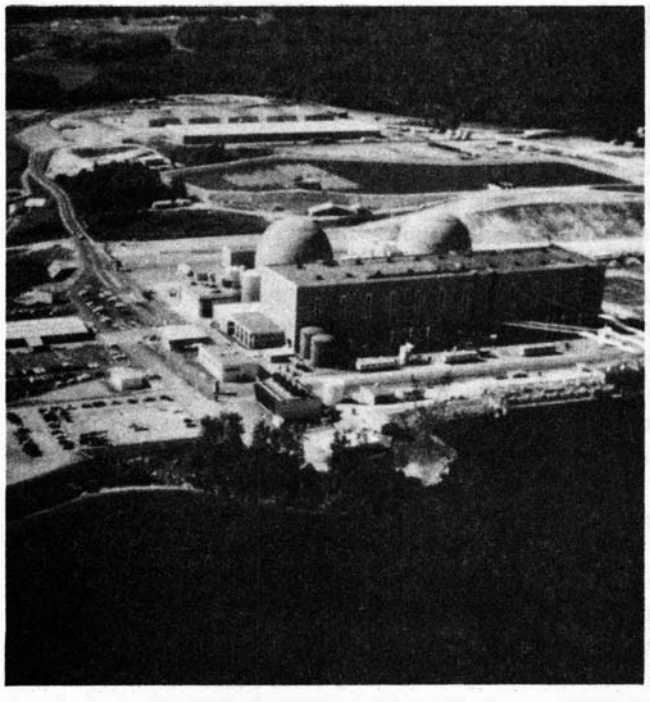
If we are to provide adequate energy for a crash SDI program, we will minimally need to revitalize the programs for the four aborted nuclear units, to permit supporting a

TABLE 1

Virginia companies with SDI contracts

(dollar amounts for FY86)

Institute for Defense Analysis	$57,438,000
Atlantic Research Corp.	$ 3,231,000
Schafer WJ Assoc. Inc.	$ 3,094,000
Kaman Sciences Corp.	$ 2,850,000
Int. Business Machines	$ 2,054,000
G T Devices Inc.	$ 1,928,000
BDM Corp.	$ 1,299,000
Polaris Inc.	$ 1,127,000
TRW Inc.	$ 1,019,000
Betac Corp.	$ 593,000
System Planning Corp.	$ 400,000
Computer Sciences Corp.	$ 325,000
Orlando Tech. Inc.	$ 238,000
General Research Corp.	$ 207,000
Science Applications Int.	$ 193,000
Shenandoah System Co.	$ 185,000
Analytic Decisions Inc.	$ 153,000
Presearch Inc.	$ 105,000
Sparta Inc.	$ 57,000
Total	**$97,986,000**



Bob Jones

The North Anna Power Station, one of Virginia's two nuclear plants, needed to power an industry buildup.

population expected to increase exponentially. Additionally, reliable "excess" power sources are required for directed-energy (e.g., laser) research.

Virginia's uranium

One of Virginia's unique features is its capacity to mine and process its own uranium for local power plants, as well as make more available for exports. There are two areas of uranium deposits in the state (see map). In 1981, Marline Uranium Corp. discovered an estimated 30 million pounds of high-grade uranium in Pittsylvania County (southern Virginia). Marline, a subsidiary of the New York-based Marline Oil Corp., had leased about 55,000 acres in Virginia and had been drilling near Danville. The find, if developed, was estimated to be worth $200 million and 900 jobs to the county. There was considerable local support for the project, although the Virginia Farm Bureau eventually came out against the mining for fear that contaminated water would poison tobacco crops.

Some 15,000 acres were also discovered in the more northern counties of Orange, Culpeper, Fauquier, and Madison, and it was in these areas (in the general vicinity of the University of Virginia at Charlottesville) that local protests were organized. The radical conservationist Piedmont Environmental Council was leader of the pack. Through a series of legislative maneuvers, a bill was passed in the 1982 legislative session and signed by Gov. Charles Robb in April 1982, providing for a moratorium on issuing uranium mining permits in Virginia. The moratorium extended until July 1984, but declared that it was state policy to allow mining in the future if it could be done safely.

In October 1984, the uranium task force of the General Assembly recommended that uranium mining be permitted in Virginia on condition that more stringent radiation standards than the federal ones be applied; it also called for a prohibition on discharges of processed water into surrounding streams, and for strict liability standards to be administered by the courts. Marline was working toward developing joint ventures with the Tennessee Valley Authority and other utilities. Despite visits to the French government uranium-processing plant at Limoges by a few optimistic state representatives, the efforts were never brought to fruition.

It is no small matter that in a region as depressed and burdened by poverty as southwestern Virginia, a gang of special-interest "environmentalist" incompetents known as the Piedmont Environmental Council (PEC), with Gov. Charles Robb's acquiesence, were able to execute a death sentence on a much needed industry, uranium mining.

The PEC simply does the leg-work for private interests that include the Mellon family, who oppose the development of SDI, nuclear power, and just about everything else.

Aside from the uranium potential, the most important mineral resource in Virginia, both in quantity and value, is

bituminous coal. Coal, although antiquated as an energy source, is in great demand for making composite materials. Seven counties in the Appalachian Plateaus region, underlaid chiefly by sandstone, shale, and coal, constitute the Southwest Virginia Coal Field (see map). During 1985, more than 44 million tons of bituminous coal valued at $1.55 billion were produced from this field. Bituminous coal has also been produced in the Richmond area and semianthracite coal in the Valley and Ridge region. In 1985, Virginia ranked sixth among coal-producing states, with large reserves of high-quality coal still present.

Virginia is also rich in economically valuable rock for construction. Deposits of granitic rocks, trap rock, soapstone, slate, quartzite, and other rocks occur in the Piedmont region. The production of stone, which may be crushed for roads, concrete aggregate, and other uses, or shaped for use as dimension stone, comes next in importance after coal. The total value of stone quarried in 1985 was more than $228 million. Kyanite occurs in the Piedmont, and Virginia is the leading state in production of this mineral, which is used for ceramic and refractory products. Hence, there is a tremendous amount of natural resources in Virginia for the building projects needed.

A space museum, ship museum, and space station

The ambitious plans already under way in the state for technology museums and science centers can be of great educational value in giving the local and regional population some of the tools required to enter the Space Age.

The Air and Space Museum in Washington, D.C.—the most heavily trafficked museum in the world—is going to open a Shuttle museum branch at Dulles International Airport. On June 5, the National Capital Planning Commission approved an estimated $1.9 billion in federal facilities, which included $32 million for the Dulles Wing of the National Air and Space Museum.

The project was described by the Federal Capital Improvements Program in the following terms: "Thirty-two million dollars for the design and construction of a 100,000 square-foot aircraft hangar-type building for the exhibition of large aircraft and spacecraft such as the space shuttle, the Concorde, and the Boeing 747 and 707 jetliners." The description concluded that, eventually, the Smithsonian Institution believes that four hangar facilities of approximately 100,000 square feet each could be constructed over a 10-15 year period. This could be a major science and educational institution.

In June, plans were released for a $30 million national maritime center on the Norfolk waterfront. It would combine the latest in marine technology with international shipping and naval history. Combining groups such as the Navy, the Coast Guard, the Virginia Port Authority, and the Virginia Institute of Marine Science, as well as Norfolk Southern Corp. Railroad, and several shipyards, the maritime center is being built instead of the proposed Cousteau Ocean Center, which was envisioned as an indoor amusement park. In this case, at least, wiser heads prevailed.