



THE DEFENSE MONITOR

The Center for Defense Information believes that strong social, economic, political, and military components and a healthy environment contribute equally to the nation's security. CDI opposes excessive expenditures for weapons and policies that increase the danger of war.

©1999 Center for Defense Information — Washington, DC

I.S.S.N. # 0195-6450

Volume XXVIII, Number 1

1999

What's Inside...

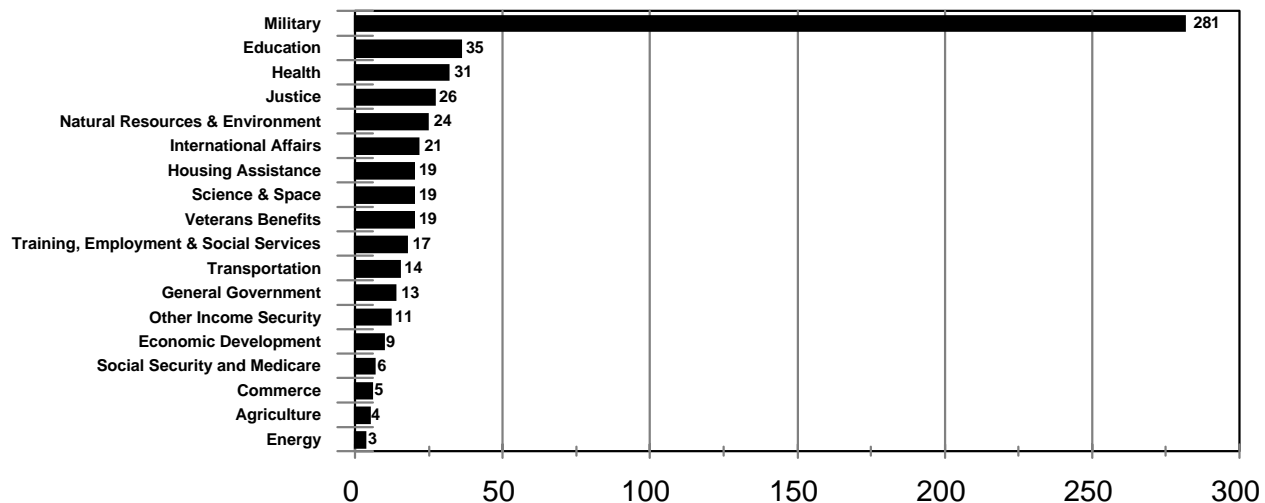
- Funding Boost for "Nunn-Lugar" (Page 4)
- Concern about "Star Wars" Missile Defense Program (Page 5)
- What Does It All Mean? (Page 8)

The Fiscal Year 2000 Military Budget

On February 1, the Clinton Administration unveiled its spending proposal for Fiscal Year 2000. As expected, it includes \$12.6 billion in new spending for the Pentagon in FY'00, the first spending increase for the military submitted by the White House in 14 years. In all it includes \$112 billion in additional funding for the military over the next six years. The budget includes \$280.8 billion in Budget Authority (BA) and \$274.1 billion in Outlays for the Pentagon and the defense functions of the Department of Energy in FY'00. Budget Authority over the entire Future Years Defense Plan (FYDP), which covers FY 2000-2005 inclusive, is nearly \$1.9 trillion. [\[Cont'd page 2\]](#)

PRESIDENT CLINTON'S PROPOSED FY 2000 DISCRETIONARY BUDGET

(\$Billions in Budget Authority)



Note: Discretionary funding for Social Security and Medicare covers various administrative costs and is not related to benefits mandated by law.

Breakdown of the Year 2000 Budget

Military programs and essential domestic spending continue to compete for taxpayers' dollars, and, as the chart shows, **the Pentagon continues to come out on top.** The FY'00 budget request includes \$555 billion for *discretionary* spending (the money the President and Congress must decide to spend each year), \$281 billion of which will go to the Pentagon. The "National Defense" category of the federal budget (excluding veterans programs

and other military-related spending) continues to account for **more than 50 percent** of all discretionary spending. The other category of federal spending is *mandatory* spending, money that is spent in compliance with existing laws which govern a particular program or function.

Mandatory spending includes entitlements, money or benefits provided directly to individuals such as Social Security, Medicare, Medicaid, Food Stamps, and Federal Retirement. It also includes interest payments on the national debt.

Question:

How much do we spend per person to keep U.S. forces in Bosnia?

See Page 5

[BUDGET Cont'd from page 1]

The new spending includes nominal increases of \$84 billion over the FYDP and an additional \$28 billion in new spending which is made possible by inflation savings, lower fuel costs and other sources. This total, in the words of Defense Secretary Cohen, "meets the most pressing requirements identified by our uniformed leaders and will enable us to continue the military excellence that has become our nation's pride."

The Pentagon's spending plan, however, is receiving a chilly reception on Capitol Hill from GOP leaders. For example, Representative Floyd Spence, Chairman of the House Armed Services Committee, said that "this budget falls well short of adequately addressing the services' unfunded requirements."

Meanwhile, opponents of higher Pentagon spending are also making their presence felt. In late January, Representative Barney Frank held a press conference at which members of Congress expressed their opposition to the Administration's spending plan. Said Congressman Frank, "Our essential point is that the increases that the President is seeking in the defense budget are gravely mistaken for several reasons. First, and most important, they are unnecessary."

As the adjacent chart shows, military spending will continue to increase annually over the next six years. By FY 2005, the United States will be spending more than our Cold War average, 15 years after the breakup of the Soviet Union. [See graph on p.4]

Spending Priorities Remain Unchanged

Two main areas of Pentagon spending are being used to justify the proposed increases – military pay and troop readiness. As the adjacent chart shows, the FY'00 request for personnel, which includes pay and benefits, is \$73.7 billion, an increase of \$2.8 billion. Funding for Operations &

FISCAL YEAR 2000 PENTAGON BUDGET REQUEST

The Clinton Administration has requested the following funding for the military:

Budget Authority: (\$ in Billions)

| | FY'99 | FY'00 | FY'01 | FY'02 | FY'03 | FY'04 | FY'05 |
|---|-------|-------|-------|-------|-------|-------|-------|
| DoD Military* | 262.6 | 267.2 | 286.4 | 288.3 | 298.7 | 307.6 | 318.9 |
| DoE and Other (Mostly Nuclear) | 13.7 | 13.6 | 14.1 | 14.1 | 14.1 | 14.1 | 14.1 |
| National Defense | 276.2 | 280.8 | 300.5 | 302.4 | 312.8 | 321.7 | 333.0 |
| % Real Growth * (Growth in Excess of Inflation) | -.4 | -.5 | 4.5 | -1.8 | 1.0 | .2 | 1.0 |

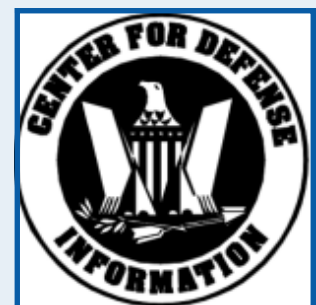
Outlays: (\$ in Billions)

| | FY'99 | FY'00 | FY'01 | FY'02 | FY'03 | FY'04 | FY'05 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| DoD Military* | 263.6 | 260.8 | 268.6 | 278.3 | 290.2 | 300.0 | 317.6 |
| DoE and Other (Mostly Nuclear) | 13.2 | 13.2 | 13.6 | 13.7 | 13.8 | 13.8 | 13.8 |
| National Defense | 276.7 | 274.1 | 282.1 | 292.1 | 304.0 | 313.8 | 331.4 |

* Includes about \$4.5 billion in FY'99 supplemental appropriations, the amount that had been released when the FY 2000 budget was finalized.

Program Budgets (Budget Authority in \$Billions)

| | |
|--|-------|
| Military Personnel | 73.7 |
| Operations & Maintenance (O&M) | 103.5 |
| Procurement | 53.0 |
| Research, Development, Test & Evaluation (RDT&E) | 34.4 |
| Military Construction | 2.3 |
| Family Housing | 3.1 |
| Other | -2.8 |
| Total: | 267.2 |



FISCAL YEAR 2000 FUNDING REQUEST FOR SELECTED WEAPONS

(\$ in Millions)

| | Research & Development | Procurement | Number Requested | FY'00 Total | Program's Per Unit Cost |
|--|------------------------|-------------|------------------|-------------|-------------------------|
| F/A-18E/F Fighter | 142.6 | 2,923.7 | 36 | 3,066.3 | 84 |
| F-22 Fighter | 1,222.2 | 1,852.1 | 6 | 3,074.3 | 187 |
| Joint Strike Fighter | 476.9 | ---- | ---- | 476.9 | 73 |
| F-16 Fighter | 112.5 | 328.3 | 10 | 440.8 | 21 |
| C-17 Transport Aircraft | 170.7 | 3,385.0 | 15 | 3,561.9 | 348 |
| E-8C Joint STARS Reconnaissance Aircraft | 130.5 | 352.5 | 1 | 483.0 | 511 |
| V-22 Osprey Aircraft | 182.9 | 985.8 | 10 | 1,168.7 | 89 |
| RAH-66 Comanche Helicopter | 427.1 | ---- | ---- | 427.1 | 26 |
| AH-64D Apache Longbow Helicopter Upgrade | ---- | 773.5 | ---- | 773.5 | 18* |
| DDG-51 Destroyer | 176.0 | 2,752.0 | 3 | 2,928.0 | 1,001 |
| SSN-21 Seawolf Submarine | 38.5 | 27.9 | ---- | 66.4 | 4,375 |
| NSSN New Attack Submarine ("Virginia" Class) | 357.2 | 748.5 | ---- | 1,105.7 | 2,163 |
| LPD-17 Landing Ship | 2.6 | 1,520.5 | 2 | 1,523.1 | 831 |
| Trident II D-5 Missile | 45.9 | 491.1 | 12 | 537.0 | 60 |
| Tomahawk Cruise Missile | 147.2 | 50.9 | 148 | 198.1 | 2.5* |
| MILSTAR Communications Satellite | 361.3 | ---- | ---- | 361.3 | N/A |
| M1A2 Tank Upgrade | 12.1 | 646.2 | 120 | 658.3 | 3.7* |
| Bradley Fighting Vehicle Upgrade | 3.2 | 345.6 | 104 | 348.8 | 1.9* |
| Family of Medium Tactical Vehicles (FMTV) | 2.0 | 425.9 | 2179 | 427.9 | 0.18 |
| Crusader Artillery System | 343.9 | ---- | ---- | 343.9 | 329 |

* Indicates the per unit cost of the base system without including costs associated with the current upgrade program.

Maintenance, a major component of troop readiness, is \$103.5 billion, up \$5.4 billion from current levels. These represent increases of 3.9% and 5.5%, respectively.

Yet while pay raises and readiness are the stated priorities in this year's budget request, the purchase of new weapons receives a larger share of new spending. As the chart also shows, the FY'00 budget request includes \$53 billion for procurement, most of which goes for the purchase of new weapons. This is an increase of \$4 billion from the current level, or a jump of 8.1%.

In fact, procurement gets the largest percentage spending increase of any Pentagon account. And as the chart above shows, the Pentagon continues to invest billions on Cold War weapons systems.

U.S. Dominates World Military Spending

Yet as the U.S. military budget grows, worldwide military spending continues to decline. Since 1985, worldwide military spending has dropped dramatically, from \$1.2

trillion to just \$804 billion in 1997. Meanwhile, the U.S. share has risen from 30% to 34%, and is still increasing.

As the chart on page 5 shows, U.S. military spending dwarfs that of any other nation. This includes Russia, the nation with the second largest military budget. The United States continues to spend nearly eighteen times as much as the combined budgets of the seven "rogue" countries. Together with our allies, we outspend the rest of the world by 50%.

U.S. MILITARY SPENDING SINCE WORLD WAR II

(Billions of FY 2000 dollars)



U.S. Military Spending, 1946-2005

(Annual Military Spending in Billions of FY 2000 dollars)

| | | | | | |
|------|-------|------|-------|------|-------|
| 1946 | 521.7 | 1967 | 384.9 | 1988 | 400.5 |
| 1947 | 142.7 | 1968 | 420.4 | 1989 | 401.9 |
| 1948 | 97.3 | 1969 | 409.2 | 1990 | 384.3 |
| 1949 | 135.1 | 1970 | 378.7 | 1991 | 333.7 |
| 1950 | 140.7 | 1971 | 345.0 | 1992 | 355.5 |
| 1951 | 217.0 | 1972 | 319.8 | 1993 | 336.2 |
| 1952 | 386.5 | 1973 | 291.2 | 1994 | 317.6 |
| 1953 | 428.4 | 1974 | 278.9 | 1995 | 301.2 |
| 1954 | 407.9 | 1975 | 272.7 | 1996 | 287.9 |
| 1955 | 347.9 | 1976 | 263.9 | 1997 | 286.4 |
| 1956 | 328.6 | 1977 | 266.5 | 1998 | 273.7 |
| 1957 | 333.2 | 1978 | 267.1 | 1999 | 276.7 |
| 1958 | 326.3 | 1979 | 275.8 | 2000 | 274.1 |
| 1959 | 326.8 | 1980 | 283.5 | 2001 | 282.1 |
| 1960 | 319.8 | 1981 | 297.2 | 2002 | 292.1 |
| 1961 | 319.7 | 1982 | 318.4 | 2003 | 304.0 |
| 1962 | 338.0 | 1983 | 344.7 | 2004 | 313.8 |
| 1963 | 342.9 | 1984 | 359.2 | 2005 | 331.4 |
| 1964 | 339.8 | 1985 | 379.8 | | |
| 1965 | 309.0 | 1986 | 400.5 | | |
| 1966 | 331.8 | 1987 | 401.6 | | |

Funding Boost for Nunn-Lugar

The Clinton Administration's budget request for Fiscal Year 2000 included plans to increase funding for U.S. programs which assist Russia and the former Soviet republics dismantle and dispose of their nuclear, chemical and biological weapons, and protect their stockpiles of these weapons and fissile materials. In all, the Administration plans to spend \$4.2 billion on these programs from FY 2000 through 2005.

Commonly referred to as "Nunn-Lugar" after its congressional sponsors — former Senator Sam Nunn (D-GA) and Senator Richard Lugar (R-IN) — the Cooperative Threat Reduction Program (CTR) was initiated in 1991 to prevent the spread of weapons of mass destruction from Russia and the former Soviet republics.

While Nunn-Lugar was initially funded almost entirely through the Defense Department, it now receives substantial funding from other U.S. agencies. Approximately \$3.1 billion has been budgeted to date for the program

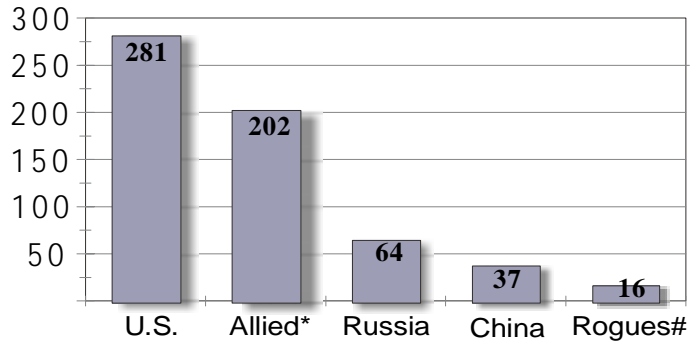
Programs funded through DoD's CTR focus on eliminating strategic delivery systems such as bombers and ballistic missiles, halting the production of nuclear materials, and transporting and storing nuclear materials and weapons. The FY'00 request for CTR is \$476 million, up \$36 million from last year's levels. Under the Administration's plan, the CTR program will receive \$2.9 billion over the next six years.

The Department of Energy's International Materials Protection Control and Accounting (MPC&A) program promotes the security of fissile materials at civilian and military sites. The FY'00 request for the MPC&A program is \$145 million, up \$45 million from last year. In all, \$265 million for Nunn-Lugar is included in DoE's FY'00 budget request.

(Cont'd on the following page)

U.S. Military Spending vs. The World

1998 \$ in Billions



* "Allies" include the NATO countries, Japan and South Korea

The "Rogue" states are Cuba, Iraq, Iran, Libya, North Korea, Sudan and Syria

| Selected Countries | Military Budget |
|--------------------|-----------------|
| United States | \$281 |
| Russia* | \$64 |
| China* | \$37 |
| United Kingdom | \$37 |
| Japan | \$35 |
| France | \$30 |
| Germany | \$26 |
| Saudi Arabia | \$18 |
| Italy | \$17 |
| South Korea* | \$15 |
| Taiwan* | \$14 |
| Brazil | \$14 |
| India | \$10 |
| Turkey | \$8 |
| Australia | \$7 |
| Netherlands | \$7 |
| Israel | \$7 |
| Spain | \$6 |
| Canada | \$6 |
| Iran | \$6 |
| North Korea* | \$5 |
| Greece | \$4 |
| Kuwait | \$4 |
| Poland+ | \$3 |
| Pakistan | \$3 |
| Belgium | \$3 |
| Norway | \$3 |
| Denmark | \$3 |
| Egypt | \$3 |
| Syria | \$2 |
| Portugal | \$2 |
| Libya | \$1 |
| Iraq | \$1 |
| Vietnam | \$1 |
| Czech Republic+ | \$1 |
| Cuba | \$0.7 |
| Hungary+ | \$0.6 |
| Sudan | \$0.3 |

Figures are for latest year available, usually 1998. Expenditures are used in a few cases where official budgets are much lower than actual spending.

* 1997 Expenditures

+ Nominated for NATO membership

Table prepared by Center for Defense Information.

Sources: International Institute for Strategic Studies; Department of Defense.

[LUGAR Cont'd from page 4]

State Department funding represents the U.S. contribution to a multilateral program, the Multinational Science Centers. This program is designed to reduce the likelihood that Russian weapons scientists and technicians will be recruited by other countries or terrorist groups. The United States' annual contribution is \$17 million, which funds one-third of the program's projects.

Initially there was significant congressional opposition to the Nunn-Lugar program. Opponents included members who generally do not support foreign assistance programs and those who felt that U.S. funds spent on assisting Russia dismantle portions of its arsenal would free up funds for other Russian military programs. Over its lifetime, however, opposition has faded. Congress has come to realize that Nunn-Lugar is not foreign aid but money that promotes U.S. security by reducing the risk of nuclear, chemical and biological weapons proliferation.

Concern About "Star Wars" Missile Defense

Among the many programs on which the FY2000 Budget proposes to spend more money, the National Missile Defense (NMD) program provides the clearest, most powerful illustration of huge sums of money being wasted to address a highly unlikely threat. Here are just a few of the reasons to challenge this massive expenditure.

Threat

The least likely threat of direct attack on the United States is in the form of a small nuclear missile attack. Today, only Russia and China possess intercontinental range ballistic missiles and neither nation has any reason to launch an attack. Russia is heavily dependent on U.S. assistance in various forms as well as foreign investment. All of this would end immediately if they were to engage in any measure of aggression against any of the western allies, or even threatened such aggression. China enjoys a massive trade surplus with America which is critical to its economic development. Neither does China have any tradition of external military action except when responding defensively, as in Korea in 1950.

(Cont'd on the following page)

Answer:

We currently spend \$261,000 to support each of the 6,900 U.S. military personnel stationed in Bosnia, a total of \$1.8 billion annually.

(MISSILE Cont'd from page 5)

The future capability of the so-called rogue nations to develop and employ intercontinental range ballistic missiles is highly exaggerated. Not only does such a missile require the investment of huge sums of money and extensive testing, it also requires development of reliable weapons of mass destruction (nuclear, chemical or biological) which can fit on the missiles and remain militarily effective when delivered. The technological obstacles to meeting all of these requirements are immense.

There is also the fact that America's borders and ports are open to penetration at much less cost and risk. Even a crude nuclear device totally unsuitable for missile delivery could be secreted in the hull of a merchant ship or within various shipping containers and arrive undetected at

countless harbors and transportation centers throughout the United States. The same is true for biological and chemical agents. Unlike ballistic missiles which carry a return address and thus guarantee swift, devastating retaliation, weapons delivered by clandestine means make effective retaliation much more difficult or even impossible.

In short, NMD, at best, would provide at great cost some unspecified measure of defense against the least likely form of attack which could be carried out for whatever reason by an easily identified adversary.

Feasibility

The Director of the U.S. Ballistic Missile Defense Organization (BMDO), Lt Gen Lester Lyles, recently noted that "hit to kill" is akin to shooting a bullet with a bullet, something very difficult to do. To date, in attempting to solve the problem of defending America against missile attack, the United States has spent \$55 billion and still has not developed technology that will work. The last five attempts to intercept a missile all failed miserably.

Even if the bullet against bullet problem is ultimately solved, the interceptor vehicles must be integrated into a highly complex automated system of satellite based sensors capable of detecting, tracking and classifying the incoming target(s). This process must be supported by a computer controlled command and control system capable of automated responses within a very few minutes or seconds. Even though the present concept is that NMD will only be capable of defending against a maximum of 20 incoming warheads, there can never be any confidence that this entire system will function reliably and effectively the first time it is needed in the real world.

Consequences

Proponents of NMD attempt to deal with these challenges by arguing that even if not perfect, some level of defense is better than none. If one discounts the immense costs of erecting limited defenses against an unlikely threat, this argument might be true except for the probable consequences of deploying NMD.

NMD Threatens Abrogation of ABM Treaty

First, the present concept of the NMD structure clearly violates the provisions of the 1972 Anti-Ballistic Missile (ABM) Treaty with the Soviet Union. Unless Russia (as the successor state) agrees to modify the terms of the Treaty to accommodate U.S. actions, there is an implied threat that we will unilaterally abrogate it. This would certainly have serious consequences in terms of U.S.-Russian relationships, particularly in nuclear arms reduction efforts.

Without question the ABM Treaty has been a most effective means of limiting competition in nuclear arms. It was the indispensable element in producing the Strategic Arms Limitation (SALT) and Strategic Arms Reduction (START) Treaties which finally put the brakes on and reversed the runaway U.S.-Soviet nuclear arms race of the 70's and 80's. It is nearly certain that Russia will refuse to ratify the latest agreement, START II, as long as the United States proceeds with plans to deploy the NMD. This means that deployed strategic weapons will remain at the 6,000 level rather than drop to 3,000-3,500 on each side. Furthermore, it puts on hold indefinitely progress on even deeper cuts as envisioned in a follow-on START III treaty.

Recently disclosed information from the Pentagon reveals that in order to break the impasse between the U.S. and Russia on the NMD issue, a deal might be struck which would permit

**FISCAL YEAR 2000 FUNDING
REQUEST FOR BALLISTIC
MISSILE DEFENSE**

(\$ in Millions)

| | FY'00 Total |
|--|----------------|
| National Missile Defense (NMD) | 1,286.6 |
| Total Theater Missile Defense (TMD)* | 2,962.5 |
| Total Ballistic Missile Defense | 4,249.1 |
| THAAD Army theater system | 611.6 |
| Navy Area (Lower Tier) | 323.4 |
| Navy Theater Wide (Upper Tier) | 349.8 |
| Patriot PAC-3 | 410.0 |
| MEADS | 48.6 |
| Airborne Laser | 308.6 |
| Space Based Laser | 138.8 |

NOTE:

* Not all the systems being funded under the TMD program are shown. The total shown is for all TMD programs, not just those listed here.

the Russians to put three warheads on their new TOPOL-M ICBMs (instead of the single warhead called for under START II) if they would agree to U.S. deployment of our NMD system. This is precisely the wrong way to reduce the risk of nuclear attack on America. Because NMD will never be capable of thwarting a massive attack by missiles with multiple warheads, the true defense is deep cuts on both sides. It is fatuous and dangerous to deploy an ineffective defense against an increased threat.

A severe political consequence of violating, or abrogating, the ABM Treaty is that it would strengthen the ultra-nationalist faction in Russia. Already angry about NATO expansion and U.S. actions in Iraq, the hardliners could point to our illegal deployment of a NMD system as evidence that America is continuing the Cold War against Russia. They certainly would

cite this as another reason to cling to their full nuclear arsenal as the only effective counter to NMD.

CDI believes that it would be in the security interests of both the United States and Russia to cancel plans to proceed with the deployment of a National Missile Defense system. First, this would permit more emphasis on measures to reduce the strategic arsenals of both nations. Second, it would result in a savings of at least \$12 billion in the next six years, money which could be applied through the Nunn-Lugar program to assist the Russians in dismantling nuclear weapons and to improve accountability and security for their weapons and stockpiles of fissile materials. Third, it would send a clear signal to the Russians and the world that we were determined to proceed with mutual nuclear disarmament as we are pledged to do

under Article VI of the Non-Proliferation Treaty. In the long term this will do far more for the true security and well being of Americans than a costly, wasteful effort to develop a problematic defense against a highly unlikely threat.

Bring “America’s Defense Monitor” to your Community.

CDI is especially proud of its weekly TV series, “America’s Defense Monitor,” which is made available to the PBS network free of charge. If our program is not in your area, we will be happy to send you our “Citizens’ Guide to Arranging Local Broadcasts” and a sample episode from the series. With these materials you can persuade the PBS station in your community to join our growing network. Call us at 1-800-234-3334.

What Does It All Mean? (Cont'd from page 8)

One million youngsters are denied a college education every year for lack of money; 45-50 million people have no health care coverage; teachers' salaries are the very lowest among developed nations, as a percentage of Gross National Product; and saving our environment is becoming increasingly complex and expensive.

But, because of the massive build-up in weaponry, we are on the threshold of squandering what could otherwise be a “Golden Age” for America. Not only will the proposed increases in military spending squander billions of dollars to meet phantom threats, they will virtually guarantee a degenerating relationship with Russia who will see deployment of our National Missile Defense system as a unilateral abrogation of the Anti-Ballistic Missile Treaty (ABM). That, in turn, bodes poorly for the ratification of the START II Treaty by the Russians, which will then be cited as justification to continue spending \$25-30 billion annually to maintain a massive warfighting force armed with over 7,000 nuclear warheads.

We at CDI view these developments with both alarm and dismay. You can be sure that we will do everything possible to make certain that the American people are made aware of this utterly unnecessary military build-up and what it means in lost opportunities to meet the genuine needs of all Americans, now and in the future.



If you have one or more friends whom you think would enjoy receiving our Defense Monitor, please let us know the name and address of such person(s). We are anxious to expand our mailing list and share CDI's very professional analyses of these very important military issues.



What Does It All Mean?

The nation is faced with the spectacle of the President requesting a massive \$112 billion increase in military spending over the next six years only to find prominent members of Congress one-upping him by describing the President's increases as woefully inadequate. One would think the Soviet Union was back – and more threatening than ever.

What is the threat that causes the President and Congress to suddenly feel it necessary to increase military spending by such staggering sums and what does it really mean to our country? America's real problems are still very much with us, and for the first time in decades, we are in the enviable position of having the resources to address them.

(Continued on Page 7)



Center for Defense Information
1779 Massachusetts Avenue, NW
Washington, DC 20036
(202)332-0600 • Fax (202)462-4559
www.cdi.org

NON-PROFIT ORG.
 US POSTAGE
 PAID
 Washington D.C.
 Permit No. 4627

Address Correction Requested

For a single copy of this issue, send \$1.00. CDI's publication, *The Defense Monitor*, is sent without charge to all donors of \$35 or more. CDI receives no funds from Pentagon or from military contractors. The Center is financed by voluntary tax-deductible contributions from individuals and grants from foundations. Contributions may be mailed to the Center for Defense Information, 1779 Massachusetts Ave. NW, Washington DC 20036. Attention: Sen. Dale Bumpers, (Ret.).



THE STAFF

Director:

Dale Bumpers, U.S. Senator, (Ret.)

Deputy Director:

Rear Admiral Eugene J. Carroll, Jr.
 U.S.N. (Ret.)

Chairman of Board:

Rear Admiral Gene R. La Rocque
 U.S.N. (Ret.)

Chief of Staff:

Mary Davis

Chief of Research:

Colonel Daniel Smith
 U.S.A. (Ret.)

Senior Fellows:

David T. Johnson
 Lt. Colonel Piers M. Wood
 U.S.A.R. (Ret.)

Administrative Assistant:

Eleanor Harrison

Research Staff:

Christopher Hellman
 Oscar Lurie
 Anna Klingsberg
 Jeffrey Mason
 Rachel Stohl
 Tomas Valasek

Interns:

Douglas Black (Georgetown)
 Theodore W. Bridges (Georgetown)
 Doug Gritzmacher (Washington St.)
 Erin Rodenhouse (Hope College)
 Greg Wilson

Systems Manager:

Mark Ashton

Web Design:

David Groomes

TV Production Staff

America's Defense Monitor:

Glenn Baker
 Moon Callison
 Laura Feinstein
 Jon Lottman
 Stephen Sapienza
 Mark Sugg

Development:

Lynn Schuster

Consultants:

Samuel J. Gorlitz
 Margaret Brenman-Gibson, Professor,
 Harvard University School
 of Medicine

Principal Analysts This Issue:

Chris Hellman
 Rear Admiral Eugene J. Carroll, Jr.
 U.S.N. (Ret.)

BOARD OF ADVISORS

Doris Z. Bato—Santa Fe, NM
Arthur D. Berliss, Jr.—Captain, USNR
 (Ret.); former Vice-President, Allen-Hollander
 Co., New York, NY
Edward H.R. Blitzler—Former Chairman,
 Lightolier Inc., New York, NY
Dick Brukenfeld—Dobbs Ferry, NY
Ben Cohen—Chairman, Ben & Jerry's
 Homemade, Inc., South Berlington, VT
James R. Compton—President, J.R. Compton
 Developments; Chair, Fund for Peace Board,
 Los Gatos, CA
Joseph N. Deblinger—President, Deblinger
 Sales & Marketing Corp., Manhasset, NY
Gay Dillingham—CNS Communications,
 Santa Fe, NM
James A. Donovan—Colonel, USMC (Ret.),
 Author, former publisher Journal of the Armed
 Forces, Atlanta, GA
Robert L. Frome—Senior Partner, Olshan,
 Grundman and Frome, Attorneys, New York,
 NY
Seth M. Glickenhous—Investment Banker,
 New York, NY
Yoel Haller, M.D.—Santa Barbara, CA
Mrs. Eva Haller—Santa Barbara, CA
Dr. James D. Head—President, Strategy
 Development Company, Freeland, MI
David H. Horowitz—New York, NY
Robert G. James—Rear Admiral, USNR
 (Ret.), President, Enterprise Development
 Associates, New York, NY
Dr. Alan F. Kay—Businessman, St.
 Augustine, FL

Eugene M. Lang—Founder/ Chairman
 Emeritus, REFAC Technology Development
 Corp. and "I Have A Dream" Foundation,
 New York, NY
Paul Newman—Motion Pictures, Los Angeles,
 CA
Mr. and Mrs. Joseph Pulitzer IV—St.
 Louis, MO
Rudolph S. Rasin—President, The Rasin
 Corporation, Chicago, IL
John M. Rockwood—Publisher, Chicago, IL
Martha S. Schauss—River Forest, IL
Julie Schecter, Ph.D.—Director, Peaked Hill
 Trust, Wayland, MA
Richard Schuckman—Business Executive,
 Fair Lawn, NJ
John J. Shanahan—Vice Admiral, USN
 (Ret.), Ormond Beach, FL
Luella B. Slaner—Scarsdale, NY
Adele E. Starr—Mamaroneck, NY
Philip A. Straus—Partner, Neuberger and
 Berman, Members, New York Stock Exchange,
 New York, NY
Phillip A. Straus, Jr.—Photographer,
 Philadelphia, PA
Andrew Ungerleider—Earthstone
 International Ltd., Santa Fe, NM
Albert B. Wells—
 President, The Abelard Foundation, Inc.;
 Kingsley, Schreck, Wells & Reichling,
 Private Investments, San Francisco, CA
Harold Willens—Former Chairman, Factory
 Equipment Corporation, Los Angeles, CA
Joanne Woodward—Actress-Director,
 Westport, CN

© Copyright 1999 by the Center for Defense Information. The Center for Defense Information encourages quotation and reprinting of any of the material, provided the Center is credited. The Center requests a copy of such use.