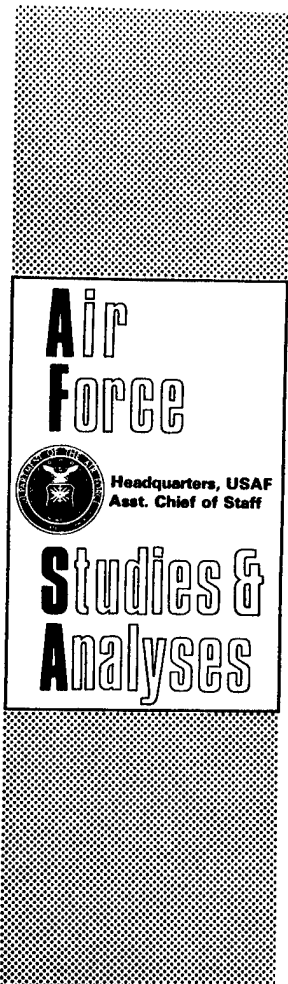


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GUNS and BUTTER

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GUNS AND BUTTER

by

MAJOR GENERAL ROBERT A. ROSENBERG

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THE DEFENSE BUDGET HAS COME UNDER ATTACK RECENTLY AS THE SOURCE OF A NUMBER OF PROBLEMS THAT THE AMERICAN ECONOMY FACES. THESE PROBLEMS RANGE FROM UNEMPLOYMENT TO THE SIZE OF THE NATIONAL DEBT. BECAUSE THE DEFENSE PORTION OF THE BUDGET IS PRESENTLY INCREASING WHILE SOME NON-DEFENSE PROGRAMS ARE BEING REDUCED, THE ATTACKS ARE BECOMING MORE FREQUENT. I THINK THIS IS A NATURAL REACTION BORN OUT OF FRUSTRATION IN TRYING TO COPE WITH THE MANY FACETS OF OUR ECONOMIC PROBLEMS; HOWEVER, DECREASING THE MILITARY BUDGET WILL ONLY EXACERBATE OUR AND THE REST OF THE FREE WORLD'S PROBLEMS.

CRITICS OF DEFENSE SPENDING HAVE RESURRECTED THE OFTEN DEBATED ISSUE OF THE TRADE-OFF BETWEEN SPENDING FOR NATIONAL DEFENSE AND SPENDING FOR SOCIAL PROGRAMS, ALSO KNOWN AS THE "GUNS VS. BUTTER" DEBATE. THEIR PREMISE IS THAT DOLLARS SPENT ON DEFENSE HARDWARE COME AT THE EXPENSE OF BASIC SOCIAL PROGRAMS. HISTORY DOES NOT SUPPORT THIS CONTENTION.

THE PURPOSE OF THIS PRESENTATION IS FIRST TO IDENTIFY THE FORCES THAT DRIVE THE NEED FOR DEFENSE SPENDING; SECOND, TO REVIEW THE RECENT HISTORY OF THE AMERICAN ECONOMY AND THE DEFENSE BUDGET; AND FINALLY TO PROVIDE SOME PERSPECTIVES ON THE RELATIVE COST OF DEFENSE.

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WHAT DRIVES DEFENSE REQUIREMENTS?

THE TWO MAIN FACTORS WHICH DRIVE FEDERAL BUDGET DECISIONS HINGE ON INTERNALLY GENERATED NATIONAL DESIRES AND OBJECTIVES AND ON EXTERNALLY CAUSED REACTIONS TO WORLD EVENTS. OUR NON-DEFENSE SPENDING CONSIDERATIONS FOR VARIOUS LEVELS OF GOVERNMENT SPONSORED SOCIAL SERVICES ARE BASED ON INTERNAL REQUIREMENTS OR COMMITMENTS TO SUSTAIN OR TO IMPROVE STANDARDS OF LIVING FOR OUR CITIZENS. OUR DEFENSE SPENDING REQUIREMENTS RESPOND TO BOTH INTERNAL AND EXTERNAL FACTORS.

DEFENSE REQUIREMENTS, WHICH EVENTUALLY EQUATE TO OUR OVERALL MILITARY CAPABILITY, MUST BE RESPONSIVE TO EXTERNAL FACTORS - THE INTERNATIONAL ENVIRONMENT, OR IN MORE BLUNT TERMS, THE THREAT. IT IS THE NATIONAL OBJECTIVE OF THE SOVIET UNION, THAT CONSTITUTES THE THREAT. LET ME DISCUSS THIS POINT IN A LITTLE MORE DETAIL . . .

THREAT



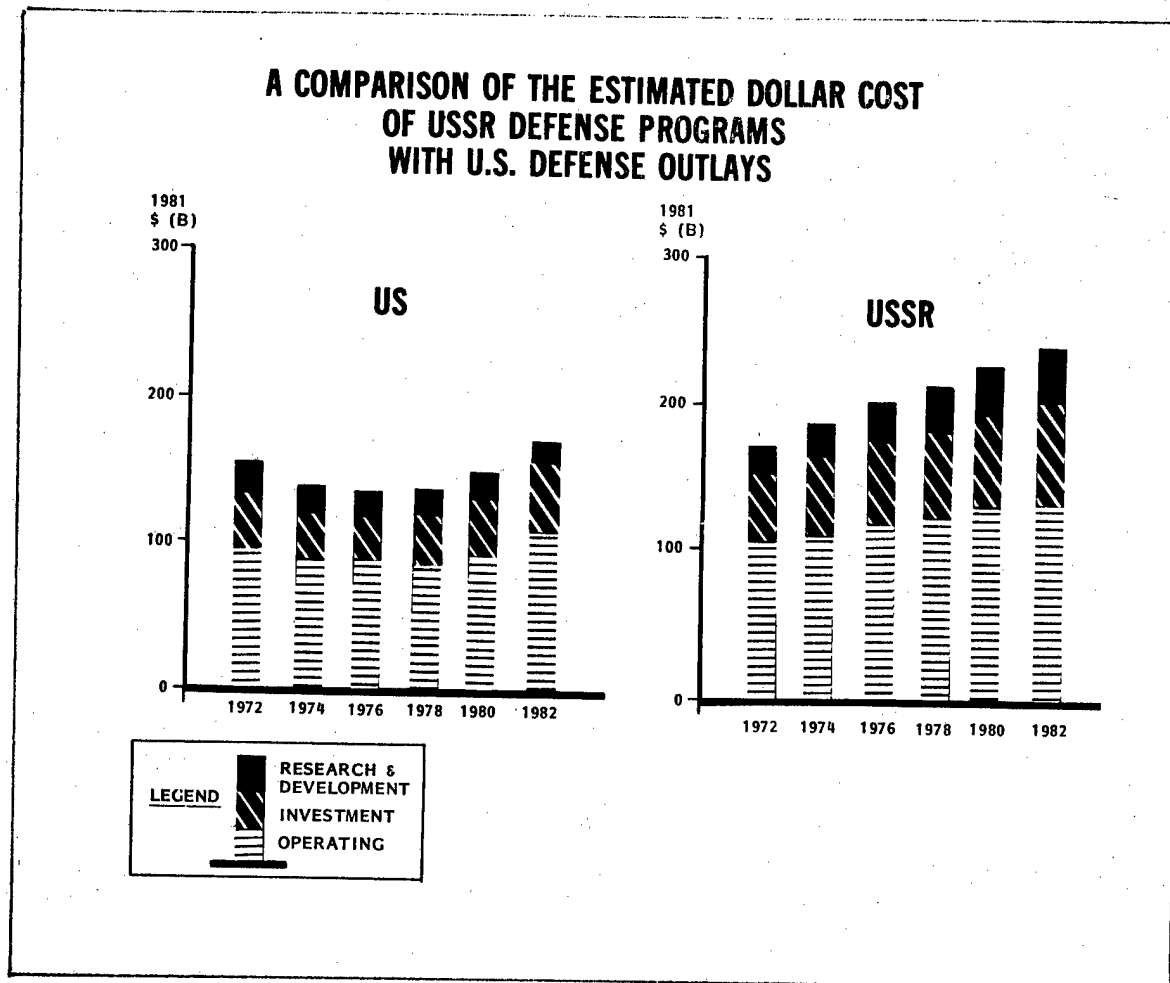
DEFENSE REQUIREMENT

HISTORICAL DEVELOPMENTS HAVE RESULTED IN AN ADVERSARY RELATIONSHIP BETWEEN THE UNITED STATES AND THE SOVIET UNION. FORTUNATELY THIS RELATIONSHIP HAS NOT RESULTED IN A DIRECT MILITARY CONFRONTATION BETWEEN THE TWO SUPER POWERS, BUT AS YOU KNOW THERE HAVE BEEN A NUMBER OF INSTANCES WHERE THE FOREIGN POLICY OF THE UNITED STATES AND SOVIET UNION REGARDING A THIRD NATION HAVE BEEN IN OPPOSITION. VIETNAM, CZECHOSLOVAKIA, HUNGARY, POLAND AND AFGHANISTAN ARE JUST A FEW EXAMPLES.

THE PATTERN OF SOVIET ADVENTURISM AFTER WORLD WAR II THROUGH THE RECENT INVASION OF AFGHANISTAN IS EVIDENCE OF THEIR DESIRE TO EXPAND COMMUNIST INFLUENCE INTO ANY AREA WHERE THEY BELIEVE THEY HAVE A GOOD CHANCE OF SUCCESS.

IN SEVERAL OPEN FORUMS THE SOVIET LEADERSHIP STATED ITS INTENTION TO DOMINATE THE WORLD, GIVEN THE OPPORTUNITY. HOW DO WE DENY THEM THIS OPPORTUNITY?

HISTORY HAS PROVEN THAT IT TAKES A COMBINATION OF FACTORS, ALL WORKING TOGETHER, TO DETER AN AGGRESSOR SUCH AS THE SOVIET UNION. THE MILITARY INGREDIENTS OF THE STRATEGY INCLUDE: NUCLEAR DETERRENCE, STRONG ALLIANCES, FORWARD DEPLOYED FORCES, THE CENTRAL RESERVE, FREEDOM OF THE SEAS, FORCE MOBILITY, COMMAND AND CONTROL, AND INTELLIGENCE. HOW MUCH STRENGTH IS ENOUGH? THAT IS NOT AN EASY QUESTION TO ANSWER, BUT I CAN ASSURE YOU THAT WE STUDY THAT ISSUE VERY CLOSELY. ONE INDICATOR OF RELATIVE STRENGTH IS THE RESOURCES THAT EACH SIDE IS DEVOTING TO THE MILITARY.



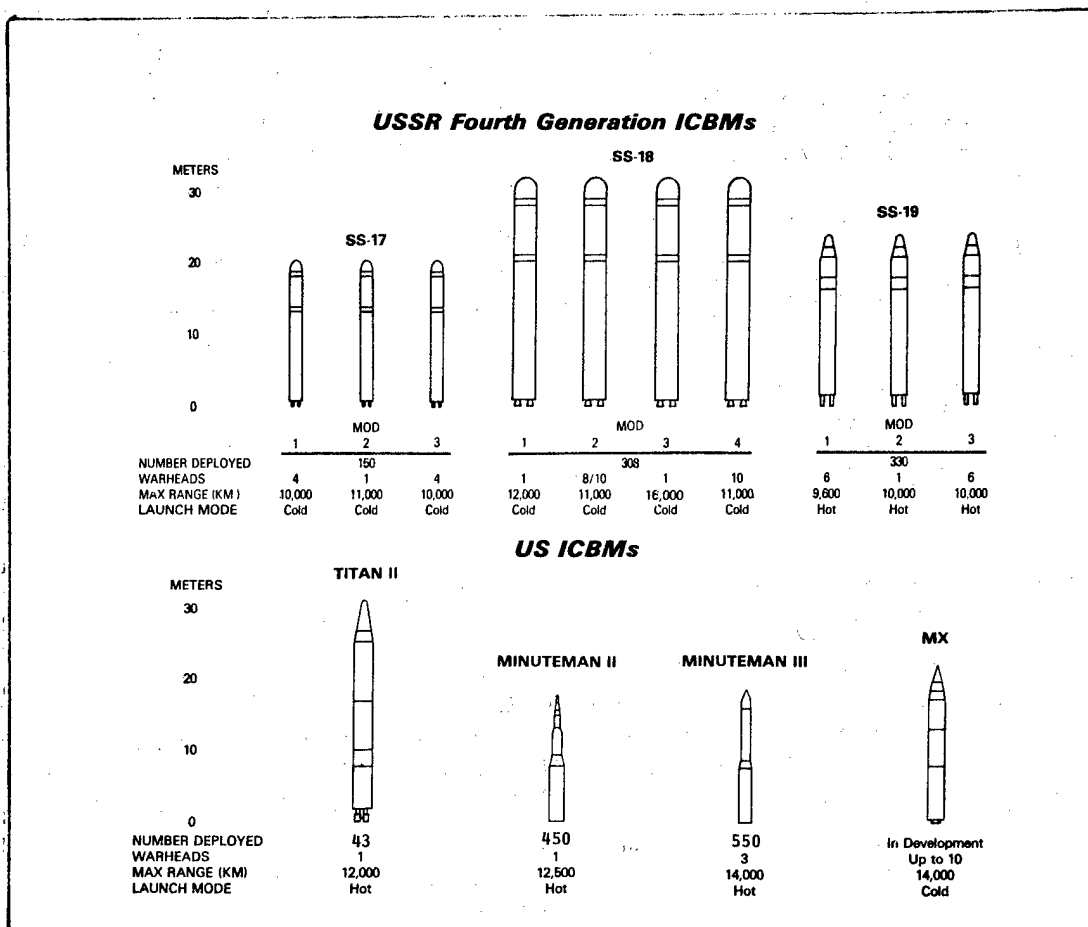
THE CHART ABOVE COMPARES TOTAL U.S. AND SOVIET MILITARY EXPENDITURES FROM 1972 TO 1982, AND REFLECTS AN ESTIMATE OF WHAT IT WOULD COST THE UNITED STATES IF WE WERE TO DUPLICATE SOVIET INVESTMENT ACTIVITIES. THESE COSTS ARE IN CONSTANT DOLLARS, WHICH MEANS THEY HAVE BEEN ADJUSTED TO ELIMINATE THE EFFECTS OF INFLATION.

AS YOU CAN SEE FROM THE TOP LINE, TOTAL ESTIMATED SOVIET EXPENDITURES HAVE BEEN RISING AT A STEADY RATE. IF YOU COMPARE THE THREE AREAS OF DEFENSE OUTLAYS; RESEARCH AND DEVELOPMENT, INVESTMENT, AND OPERATING COSTS, YOU NOTICE IMMEDIATELY THAT U.S. SPENDING DECREASED DRAMATICALLY AFTER THE VIETNAM PHASE DOWN WHILE SOVIET SPENDING STEADILY INCREASED. SINCE THE EARLY 1970'S THE SOVIETS HAVE OUT-SPENT US BY OVER 600 BILLION DOLLARS, AND THE GAP IN 1981 ALONE WAS ABOUT \$80 BILLION.

THIS SUSTAINED MILITARY BUILDUP IN WHICH THE SOVIETS ARE SPENDING AN ESTIMATED 12 to 15% OF THEIR GROSS NATIONAL PRODUCT EACH YEAR HAS RESULTED IN A SERIOUS SHIFT IN RELATIVE MILITARY STRENGTH; NOT JUST BETWEEN OUR NATION AND THE SOVIET UNION, BUT ALSO BETWEEN THE NATO AND WARSAW PACT ALLIANCES.

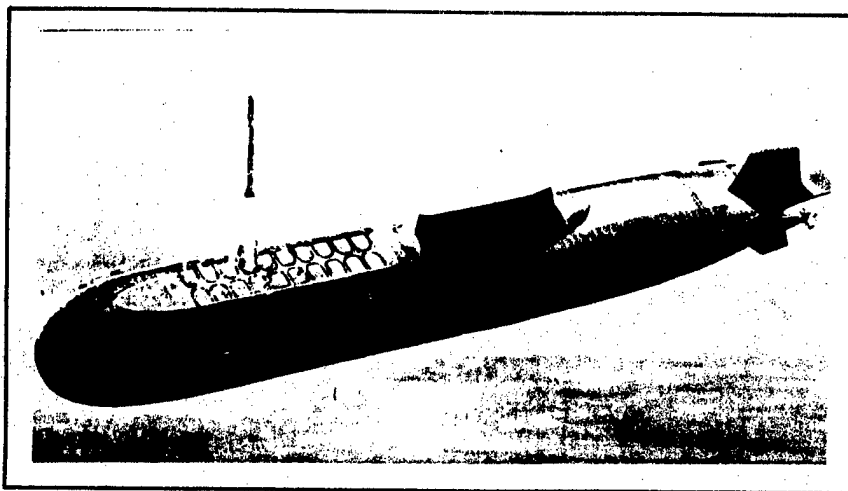
OF PARTICULAR CONCERN IS THE SOVIETS WILLINGNESS TO INVEST HEAVILY IN RESEARCH AND DEVELOPMENT--AN INVESTMENT WHICH ALLOWS THEM TO CONTINUE TO DEVELOP AND FIELD A HOST OF NEW AND IMPROVED STRATEGIC AND TACTICAL WEAPON SYSTEMS.

THE MOST THREATENING ASPECT OF THE SOVIET BUILDUP IS THE VAST IMPROVEMENT IN THEIR STRATEGIC FORCE. PICTURED ON THE CHART BELOW ARE THE THREE U.S. ICBMs: TITAN II, MINUTEMAN II, AND MINUTEMAN III. THE MINUTEMAN III IS OUR NEWEST DEPLOYED MISSILE, DESIGNED AND BUILT WITH TECHNOLOGY FROM THE EARLY 1970'S. THE SOVIET SS-18 ICBM FORCE, BY COMPARISON, HAS BEEN DEVELOPED AND DEPLOYED IN FOUR SUCCESSIVE GENERATIONS, EACH REPRESENTING SIGNIFICANT ADVANCES.



THE MOST ACCURATE VERSION OF THE SS-18 AND SS-19 ARE CAPABLE OF DESTROYING HARD TARGETS. TOGETHER, THESE SYSTEMS HAVE THE CAPABILITY TO DESTROY MOST OF THE 1,000 U.S. MINUTEMAN ICBM'S, USING ONLY A PORTION OF THE WARHEADS AVAILABLE.

MORE THAN 780 SS-17, SS-18, AND SS-19 ICBM'S HAVE BEEN DEPLOYED SINCE 1975, MOST ARMED WITH HIGHLY ACCURATE MULTIPLE WARHEADS. TWO NEW SOLID-PROPELLANT ICBM'S ARE CURRENTLY BEING DEVELOPED. ONE OF THESE IS ABOUT THE SIZE OF THE U.S. MX INTENDED FOR SILO DEPLOYMENT; THE OTHER IS A SMALLER MISSILE, WHICH WILL PROBABLY BE DESIGNED FOR DEPLOYMENT ON MOBILE LAUNCHERS SIMILAR TO THOSE USED WITH THE SS-20. TESTING PROGRAMS FOR ONE OR TWO ADDITIONAL ICBM'S, PROBABLY BASED ON THE SS-18 AND SS-19, ARE EXPECTED TO BEGIN IN 1983.

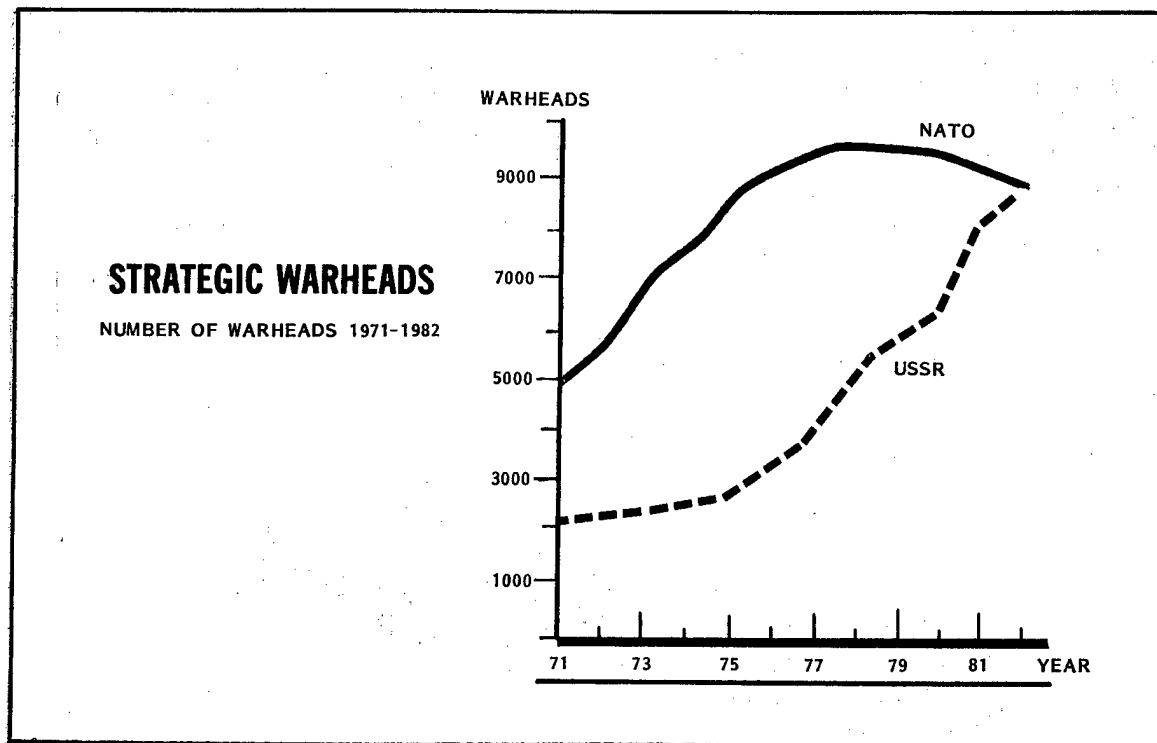


OF PARTICULAR CONCERN IS THE IMPROVEMENT AND EXPANSION OF THE SOVIET BALLISTIC MISSILE SUBMARINE FORCE. ABOVE IS AN ARTIST'S ILLUSTRATION OF THE NEW, LARGE, MULTIPLE WARHEAD SS-NX-20 SUBMARINE LAUNCHED BALLISTIC MISSILE BEING LAUNCHED FROM THE 25,000 TON TYPHOON, A NEW CLASS OF SUBMARINE LARGER THAN THE TRIDENT, OUR LARGEST BALLISTIC MISSILE SUBMARINE. THE FIRST TYPHOON COMPLETED ITS SEA TRIALS AND HAS MOVED TO PORT FACILITIES ON THE NORTH COAST OF THE KOLA PENINSULA. EQUIPPED WITH 20 LAUNCHERS FOR THE MULTIPLE WARHEAD SS-NX-20 SOLID-FUELED SUBMARINE LAUNCHED BALLISTIC MISSILE (SLBM), THE FIRST SUBMARINE OF THIS CLASS WILL BE FULLY OPERATIONAL BY THE END OF 1983. THE RANGE OF THE SS-NX-20, 8,300 KILOMETERS, PLACES ALL OF NATO EUROPE, NORTH AMERICAN AND ASIA WITHIN TYPHOON'S REACH.

THE SECOND TYPHOON-CLASS NUCLEAR-POWERED BALLISTIC MISSILE SUBMARINE (SSBN) HAS RECENTLY BEEN LAUNCHED FROM THE SOVIETS' SEVERODVINSK SHIPYARD.

COMPLEMENTING THIS GROWING DISPARITY IN DELIVERY SYSTEMS IS A MARKED INCREASE IN SOVIET STRATEGIC WARHEADS, MADE POSSIBLE BY THE FACT THAT THE SOVIETS ARE NOW ABLE TO CONVERT THE SIGNIFICANT ADVANTAGE THEY HAVE HAD IN MISSILE THROW WEIGHT TO INCREASED NUMBERS OF SMALLER, MORE ACCURATE STRATEGIC WEAPONS.

IF ALL USSR MISSILES WERE EQUIPPED WITH THE MAXIMUM NUMBER OF REENTRY VEHICLES, THE NUMBER OF SOVIET WARHEADS WOULD TOTAL SOME 9000. AS INDICATED ON THE CHART BELOW, WE STILL MAINTAIN A SLIGHT NUMERICAL ADVANTAGE IN WARHEADS; HOWEVER, THE GAP HAS CLOSED SIGNIFICANTLY OVER THE PAST DECADE.

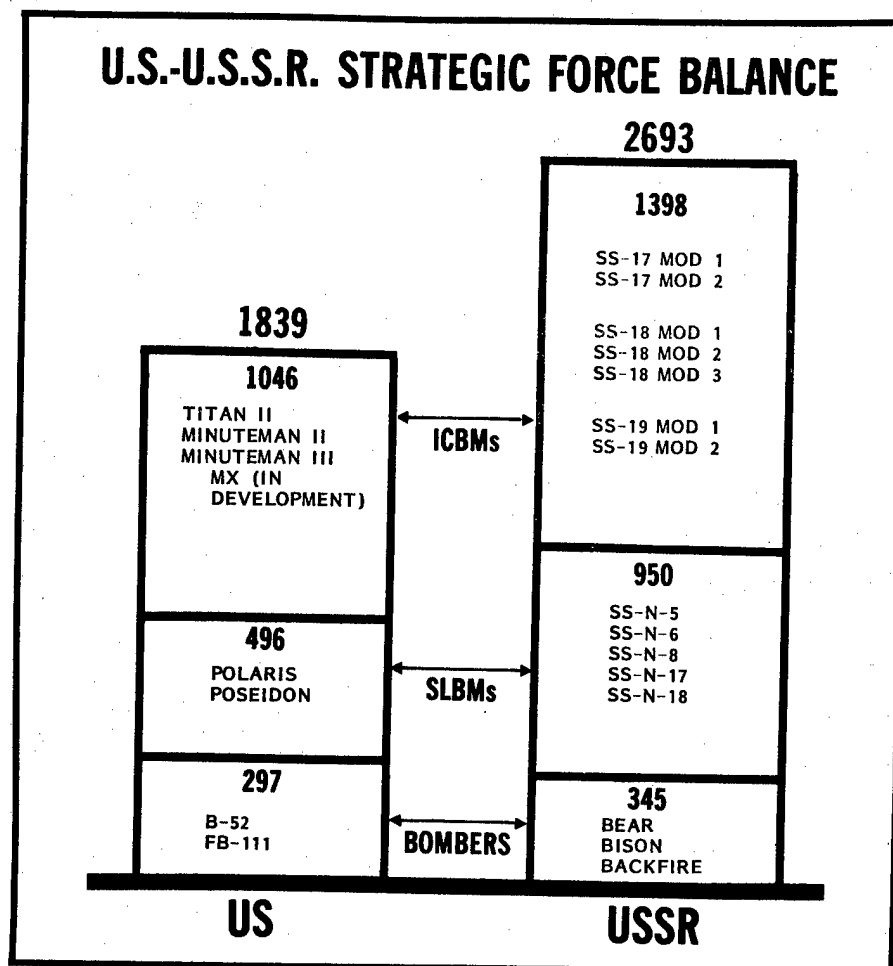


THE FACT THAT THE SOVIETS HAVE A SIGNIFICANT ADVANTAGE IN MISSILE THROW WEIGHT ALLOWS THEM TO CONTINUE TO INCREASE THE NUMBER OF NUCLEAR WEAPONS THAT CAN BE DELIVERED AS THEIR GUIDANCE TECHNOLOGY IMPROVES. THIS INCREASE IN NUMBERS DICTATES THAT WE MUST CONTINUE TO PURSUE MORE SURVIVABLE AND CAPABLE WEAPON SYSTEMS TO COUNTER THE EVOLVING THREAT AND MAKE OUR DETERRENT CAPABILITY CREDIBLE.

THE SOVIET'S ICBM AND SLBM FORCES, ALONG WITH THEIR LONG RANGE STRATEGIC BOMBERS, POSE A DIRECT THREAT TO THE UNITED STATES. OUR ALLIES ARE ALSO THREATENED BY THESE WEAPONS.

IN MARCH 1983, THE SECRETARY OF DEFENSE RELEASED A PUBLICATION PREPARED BY THE DEFENSE INTELLIGENCE AGENCY, TITLED SOVIET MILITARY POWER 1983, THIS PUBLICATION PORTRAYS THE MAGNITUDE OF THE THREAT POSED BY THE SOVIET UNION.

THE CHART BELOW SHOWS A COMPARISON OF U.S. AND USSR STRATEGIC FORCES. CURRENTLY, THE SOVIETS STRATEGIC MISSILE INVENTORY TOTALS 2348 ICBM'S AND SLBM'S COMPARED TO OUR 1542 MISSILES.



THE SOVIET ICBM FORCE HAS BEEN DEVELOPED AND DEPLOYED IN FOUR SUCCESSIVE GENERATIONS, EACH REPRESENTING SIGNIFICANT ADVANCES. THE CURRENT ICBM FORCE CARRIES SOME 6,000 NUCLEAR WARHEADS AND BY THE MID-1980S THE SOVIETS ARE EXPECTED TO COMPLETE THEIR CURRENT ICBM MODERNIZATION PROGRAMS FOR FOURTH-GENERATION SYSTEMS WHICH WHEN FULLY DEPLOYED WILL BE CAPABLE OF DELIVERING SOME 6400 WARHEADS.

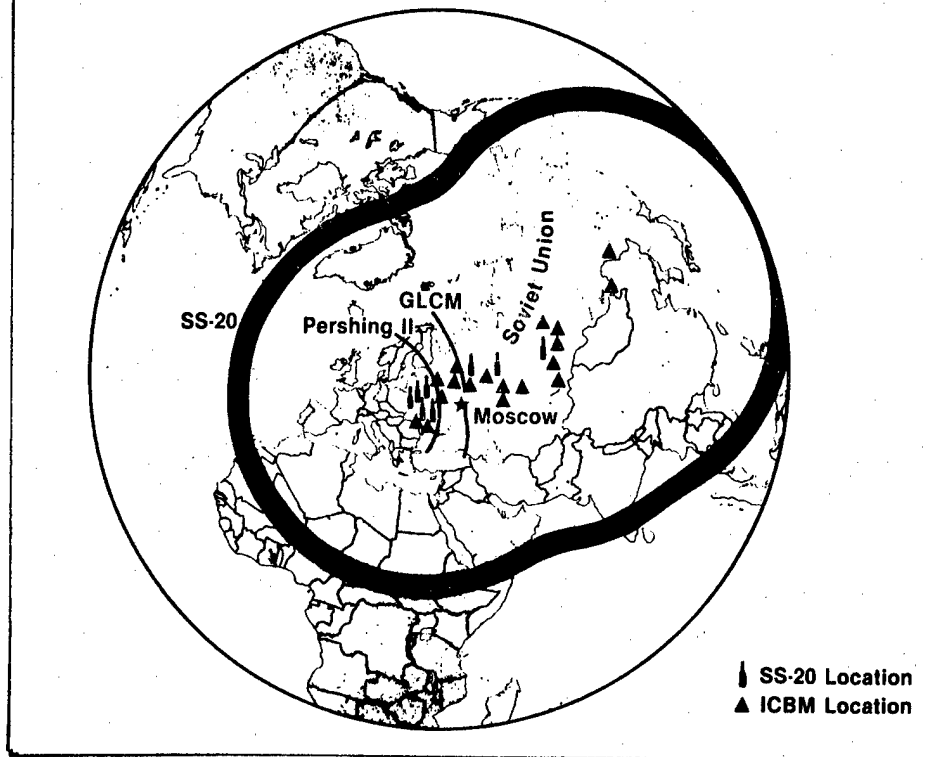
THE SOVIETS ARE ALSO INCREASING THE SIZE AND IMPROVING THE CAPABILITIES OF THEIR LONG RANGE STRATEGIC BOMBER FORCE. THEY ARE CONTINUING TO PRODUCE THE BACKFIRE AT A RATE OF ABOUT 30 PER YEAR WHILE RETAINING THEIR BEAR AND BISON BOMBER FORCE. HERE YOU SEE TWO BACKFIRE BOMBERS IN FLIGHT.



IN THE PICTURE ON THE RIGHT A BACKFIRE IS CARRYING THE FUSELAGE-MOUNTED AS-4 AIR-TO-SURFACE MISSILE. IN ADDITION, THE SOVIETS RECENTLY BEGAN TESTING A PROTOTYPE OF THE NEW BLACKJACK LONGRANGE BOMBER WHICH IS SIMILAR TO, BUT LARGER THAN, THE B-1. THE BLACKJACK WILL PROBABLY HAVE THE CAPABILITY TO CARRY AIR LAUNCHED CRUISE MISSILES, IN ADDITION TO GRAVITY BOMBS. THE SOVIETS CURRENTLY HAVE A LONG RANGE CRUISE MISSILE UNDER DEVELOPMENT.

A HEATED TOPIC OF DISCUSSION WITHIN THE PAST YEAR HAS BEEN THE NATO PLAN TO DEPLOY PERSHING II SHORT RANGE BALLISTIC MISSILES AND GROUND LAUNCHED CRUISE MISSILES IN EUROPE. THE MAP THAT FOLLOWS SHOWS THE RELATIVE SHORT RANGE OF THESE MISSILES AS COMPARED TO THE SOVIET'S SS-20 MISSILE, WHICH IS ALREADY DEPLOYED.

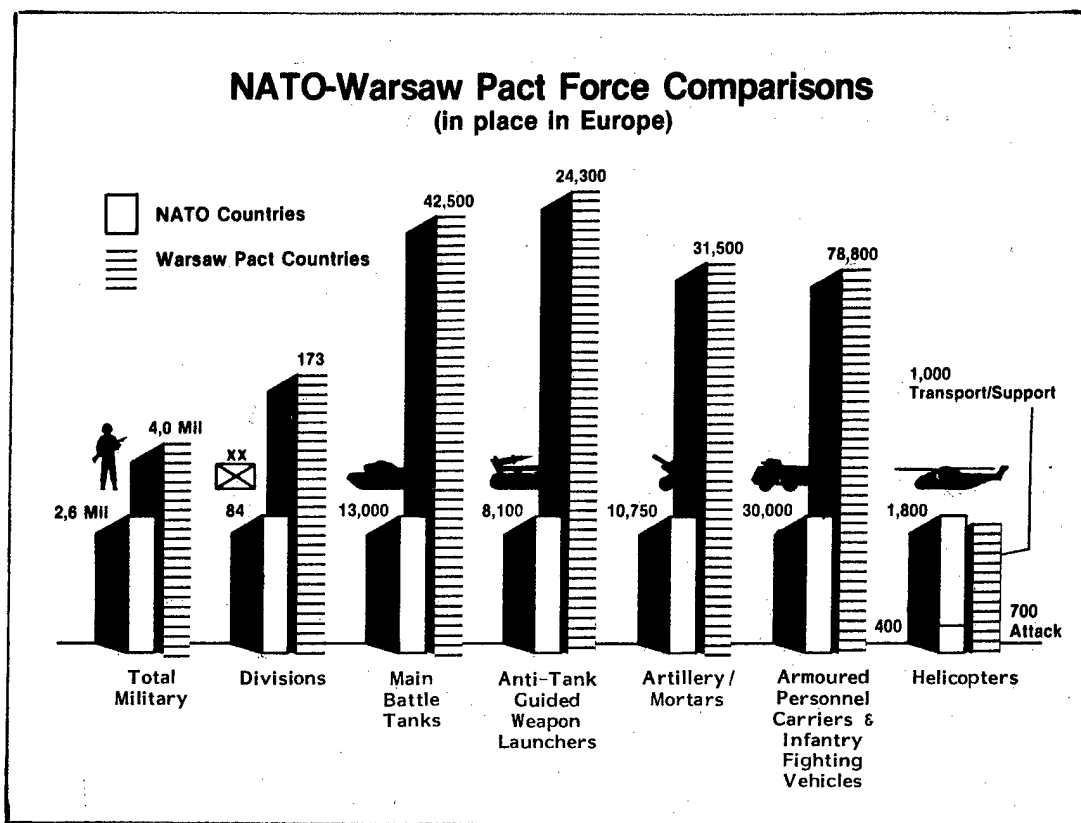
TARGET COVERAGE OF SOVIET SS-20 AND TARGET COVERAGE OF NATO PERSHING II AND GLCM



THE PERSHING'S RANGE WOULD BE EFFECTIVE TO JUST SHORT OF MOSCOW WHEREAS THE CRUISE MISSILE WOULD REACH THE MOSCOW AREA. THE SOVIET SS-20, BY COMPARISON, IS A LONGER-RANGE MISSILE WITH THREE NUCLEAR WARHEADS AND IS NOW TARGETED AGAINST WESTERN EUROPE, THE MIDDLE EAST, PARTS OF AFRICA, AND MOST OF ASIA INCLUDING CHINA AND JAPAN.

IT SHOULD BE NOTED THAT OVER 350 SS-20'S ARE NOW MISSION READY WITH THE CAPABILITY TO DELIVER ABOUT 1050 WARHEADS. MORE THAN TWO-THIRDS OF THESE MISSILES ARE PRESENTLY LOCATED WITHIN RANGE OF NATO, WHILE OUR FIRST FEW PERSHING'S AND GLCM'S WILL NOT BE DEPLOYED UNTIL LATE 1983; THE TOTAL PLANNED FORCE OF 572 MISSILES WILL NOT BE DEPLOYED UNTIL MUCH LATER.

THE SOVIET'S QUEST FOR MILITARY SUPERIORITY IS NOT LIMITED TO NUCLEAR FORCES. THEY HAVE AND CONTINUE TO DEVOTE SCARCE RESOURCES TO BUILDING A CONVENTIONAL CAPABILITY WHICH EXCEEDS BY FAR THE FORCE STRUCTURE NEEDED STRICTLY FOR DEFENSE.



THE CHART ABOVE SHOWS THAT THE WARSAW PACT HAS A NUMERICAL ADVANTAGE OVER NATO IN ALMOST EVERY CATEGORY OF CONVENTIONAL WARFARE. THIS ADVANTAGE DOES NOT IMPLY THAT THE WARSAW PACT COULD CONFIDENTLY EXPECT TO SUCCEED IN A CONVENTIONAL ATTACK ON WESTERN EUROPE. NATO'S STRATEGY OF FLEXIBLE RESPONSE, COMBINED WITH MODERN WEAPONS AND FORCE READINESS AND SUSTAINABILITY, PROVIDES A DETERRENT TO THE WARSAW PACT. HOWEVER, RELATIVE FORCE LEVELS ARE IMPORTANT. FOR EXAMPLE:

-- THE WARSAW PACT CURRENTLY HAS A 3 TO 1 ADVANTAGE IN TANKS OVER NATO AND IS EXPECTED TO WIDEN THAT MARGIN DESPITE THE DEPLOYMENT OF SEVERAL NEW NATO TANKS, INCLUDING THE U.S. M-1.

-- THE WARSAW PACT HAS EXCEEDED NATO'S MODERNIZATION PROGRAM BY WIDER DEPLOYMENT OF T-64 AND T-72 TANKS AND CONTINUING DEPLOYMENT OF A NEW, MORE CAPABLE TANK, DESIGNATED THE T-80.

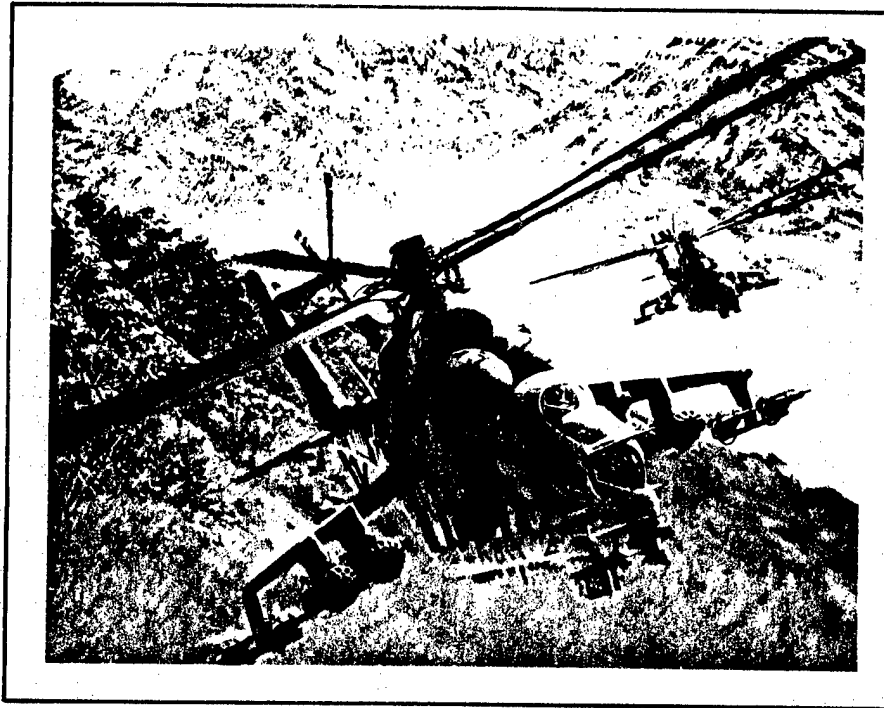
-- THIS ADVANTAGE IS WIDENING BASED ON A CONTINUING IMBALANCE IN TANK PRODUCTION.

-- FOR EXAMPLE, THE SOVIETS PRODUCED 2500 TANKS IN 1982 AS COMPARED TO JUST OVER 750 FOR NATO.

THE WARSAW PACT HAS A STANDING ARMY OF 173 DIVISIONS CONTAINING APPROXIMATELY 4 MILLION MILITARY PERSONNEL. PROTECTED BY ARMOR, THE INFANTRY UTILIZES OVER 78,000 ARMORED PERSONNEL CARRIERS AND INFANTRY FIGHTING VEHICLES. THEIR FIRE POWER IS COMPRISED OF 31,500 TACTICAL ROCKET AND ARTILLERY WEAPONS.

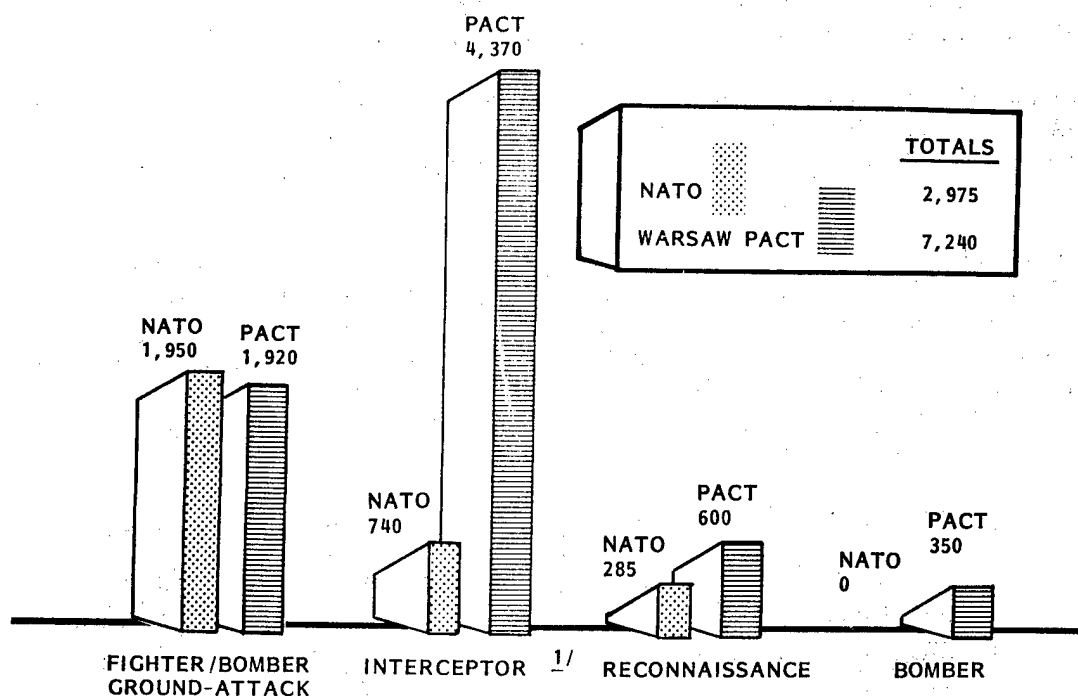
WHILE OTHER SOVIET WEAPON SYSTEMS AND ASSETS HAVE BEEN UPGRADED SUBSTANTIALLY, THE ATTACK HELICOPTER FORCE HAS BEEN APPROXIMATELY DOUBLED IN SIZE AND TECHNOLOGICALLY IMPROVED. THE TOTAL ATTACK FORCE OPPOSITE NATO HAS GROWN FROM 400 HELICOPTERS IN 1978 TO A CURRENT LEVEL OF 800.

THE HIND-E HELICOPTER, SIMILAR TO THE HIND-D SHOWN BELOW, IS ARMED WITH FOUR SEMI-AUTOMATIC LASER-GUIDED "SPIRAL" ANTI-TANK MISSILES, A MULTI-BARREL 12.7MM TURRETED NOSE GUN, AND FOUR 57-MM UNGUIDED ROCKET PODS. THE ANTI-TANK GUIDED MISSILE CAN BE REPLACED WITH A MIX OF UP TO 750 KILOGRAMS OF CHEMICAL OR CONVENTIONAL BOMBS ON EACH WING.



(THE ABOVE REPRODUCTION OF WILLIAM S. PHILLIPS' PAINTING, COURTESY OF VIRGINIA BADEN FINE ARTS LTD., 1305 KING STREET, ALEX., VA.)

NATO/WARSAW PACT COMBAT AIRCRAFT IN PLACE IN EUROPE



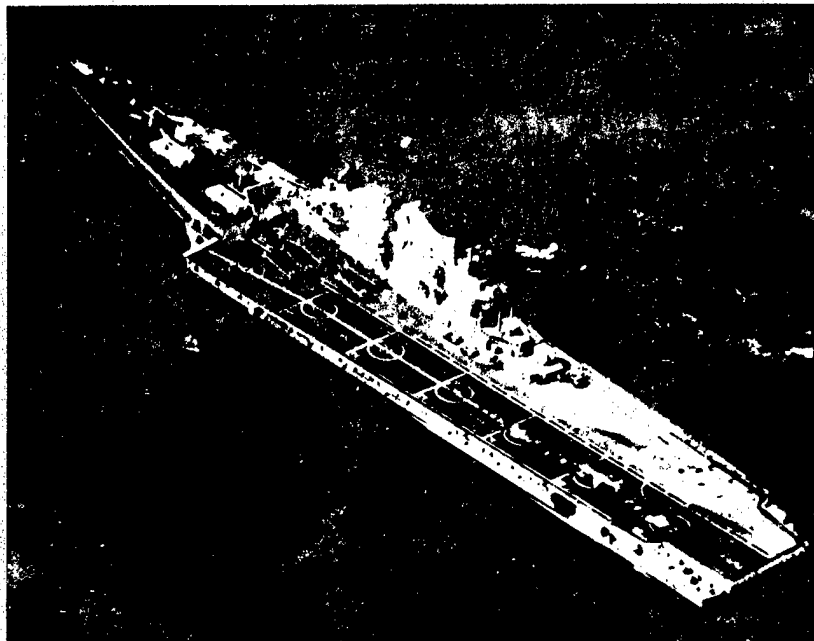
^{1/} MANY INTERCEPTORS CAN BE USED IN GROUND-ATTACK ROLES

IN TERMS OF FIGHTER AIRCRAFT, THE WARSAW PACT HAVE MORE THAN 7200 COMPARED TO LESS THAN 3000 FOR THE NATO FORCES AS SHOWN ON THIS CHART ABOVE. THE TREND IN THIS AREA IS ESPECIALLY ALARMING. SINCE LAST YEAR THE SOVIETS PRODUCED 1100 NEW FIGHTERS COMPARED TO THE U.S. TOTAL OF JUST OVER 400. THE SOVIET RATE EQUATES TO PRODUCING ONE FIGHTER AIRCRAFT EVERY 8 HOURS. TWO NEW FIGHTER AIRCRAFT, THE FLANKER AND THE FULCRUM, ARE EXPECTED TO BECOME OPERATIONAL IN THE MID 1980'S. THESE AIRCRAFT WILL BE SUPERSONIC, ALL-WEATHER COUNTER AIR FIGHTERS WITH LOOKDOWN/SHOOT-DOWN WEAPON SYSTEMS AND BEYOND-VISUAL RANGE AIR-TO-AIR MISSILES. THE FULCRUM MAY HAVE A DUAL ROLE CAPABILITY--AIR TO AIR AND AIR TO GROUND--SIMILAR TO THAT OF THE OUR F-16 AND F-18.

THE SOVIET'S AIR DEFENSE SYSTEM IS THE MOST MASSIVE IN THE WORLD. CONSISTING OF APPROXIMATELY 4500 INTERCEPTOR AIRCRAFT, ABOUT 600 MODERN STRATEGIC AIR DEFENSE INTERCEPTORS WITH AT LEAST SOME ABILITY TO ENGAGE LOW-ALTITUDE TARGETS. THEY HAVE BEGUN DEPLOYMENT OF THE FOXHOUND A, THEIR FIRST INTERCEPTOR WITH A TRUE LOOK-DOWN/SHOOT-DOWN CAPABILITY. IN CONTRAST TO THE 4500 SOVIET INTERCEPT AIRCRAFT, NATO FORCES PRESENTLY HAVE LESS THAN 1000 INTERCEPTORS WITH PLANS TO ADD APPROXIMATELY 300 F-16 AND SOME 165 EUROPEAN BUILT TORNADO AIRCRAFT, MODIFIED FOR AIR DEFENSE.

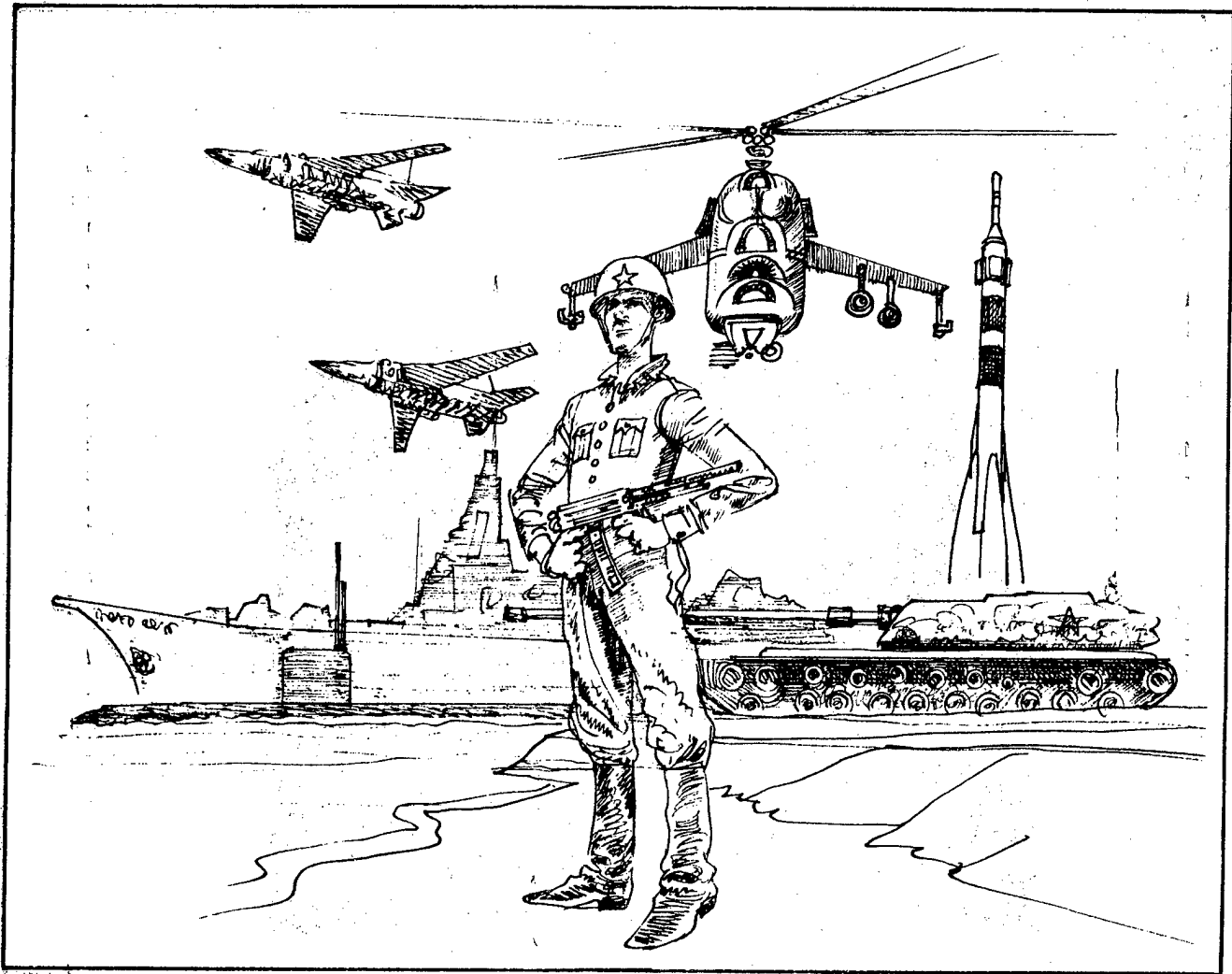
IN TERMS OF NAVAL POWER, THE SOVIETS SOON WILL BEGIN CONSTRUCTION OF THEIR FIRST LARGE NUCLEAR-POWERED AIRCRAFT CARRIER. THIS SHIP WILL CARRY CONVENTIONAL HIGH PERFORMANCE JET AIRCRAFT.

THE NEW CARRIER WILL PROBABLY ENTER NAVAL SERVICE PRIOR TO 1990. IN THE INTERIM, AS PICTURED BELOW, THE SOVIETS HAVE DEPLOYED THE KIEV CLASS CARRIER. KIEV IS A GUIDED MISSILE VERTICAL AND/OR SHORT TAKE OFF AND LANDING (VSTOL) AIRCRAFT CARRIER, WHICH CARRIES THE YAK-36 (FORGER A) AIRCRAFT. THE FORGER FIGHTER-BOMBER HAS CONTINUED TO BE BUILT TO SUSTAIN THE AIR WINGS ON THE KIEV-CLASSIER. IN LATE 1982 FORGER FIGHTER-BOMBERS, CARRYING AIR-TO-AIR MISSILES, INTERCEPTED US NAVY AIRCRAFT OVER THE INDIAN OCEAN.



AS NOTED EARLIER, DESPITE THE SOVIET NUMERICAL ADVANTAGE IN ALMOST ALL AREAS OF CONVENTIONAL WARFARE, THE U.S. HAS BEEN ABLE TO PROVIDE A CREDIBLE DETERENT BY VIRTUE OF THE SUPERIOR CAPABILITY OF OUR SYSTEMS.

THE "TECHNOLOGY ADVANTAGE" OF THE U.S. HAS DEPENDED ON OUR ABILITY TO DEVELOP AND PRODUCE MILITARY WEAPONS AND EQUIPMENT OF SUPERIOR QUALITY TO THAT OF THE SOVIET UNION. BUT AMERICAN PREEMINENCE IN SOME AREAS IS RAPIDLY DECLINING. FOR EXAMPLE, JAPAN IS A COUNTRY WHICH IS NOW CLOSE TO PARITY WITH THE UNITED STATES IN MICROELECTRONICS AND IS THE WORLD'S LEADER IN VARIOUS OTHER TECHNOLOGIES. THE EUROPEAN COMMUNITY IS COMPETING WITH THE U.S. IN LAUNCHING THE WORLD'S COMMERCIAL SATELLITES, AND WE CAN EXPECT INCREASING COMPETITION TO THE SPACE SHUTTLE PROGRAM FROM BOTH EUROPE AND JAPAN.



THE POINT TO BE EMPHASIZED IS THAT THESE AND OTHER SHIFTS IN TECHNOLOGICAL LEADERSHIP COULD RENDER THE UNITED STATES DEPENDENT ON OTHER COUNTRIES FOR SOME IMPORTANT COMPONENTS OF BASIC AND STATE-OF-THE-ART DEFENSE EQUIPMENT. THIS PROLIFERATION OF TECHNOLOGICAL CAPABILITY AND THE EASY ACCESS TO U.S. TECHNOLOGY HAS MADE IT EASIER FOR THE SOVIET UNION TO ACQUIRE WESTERN "KNOW HOW" FOR ITS OWN USE, FURTHER REDUCING THE QUALITATIVE ADVANTAGE IN WEAPONRY ONCE ENJOYED BY THE UNITED STATES.

IT IS A FACT THAT THE SOVIETS ARE STRENGTHENING THEIR MILITARY BY ACQUIRING WESTERN TECHNOLOGY. WHILE THERE ARE NUMEROUS INTERPRETATIONS OF THE TERM "TECHNOLOGY", I AM REFERRING TO THE APPLICATION OF SCIENTIFIC KNOWLEDGE, TECHNICAL INFORMATION, KNOW-HOW, CRITICAL MATERIALS, KEY MANUFACTURING AND TEST EQUIPMENT, AND END PRODUCTS. ALL OF THESE THINGS ARE ESSENTIAL IN RESEARCH AND DEVELOPMENT AS WELL AS THE MANUFACTURING OF MODERN HIGH QUALITY WEAPONS AND MILITARY EQUIPMENT.

ENGINEERING EXPLOITATION OF SOMEONE ELSE'S TECHNOLOGY DOES NOT REQUIRE THE SAME LEVEL OF EFFORT AS BASIC DEVELOPMENTAL RESEARCH. THE SOVIETS LEARNED THIS LESSON LONG AGO AND HAVE LAUNCHED A CAMPAIGN TO ACQUIRE WESTERN TECHNOLOGY, EITHER THROUGH NORMAL TRADE CHANNELS OR THROUGH A VIGOROUS ESPIONAGE EFFORT.

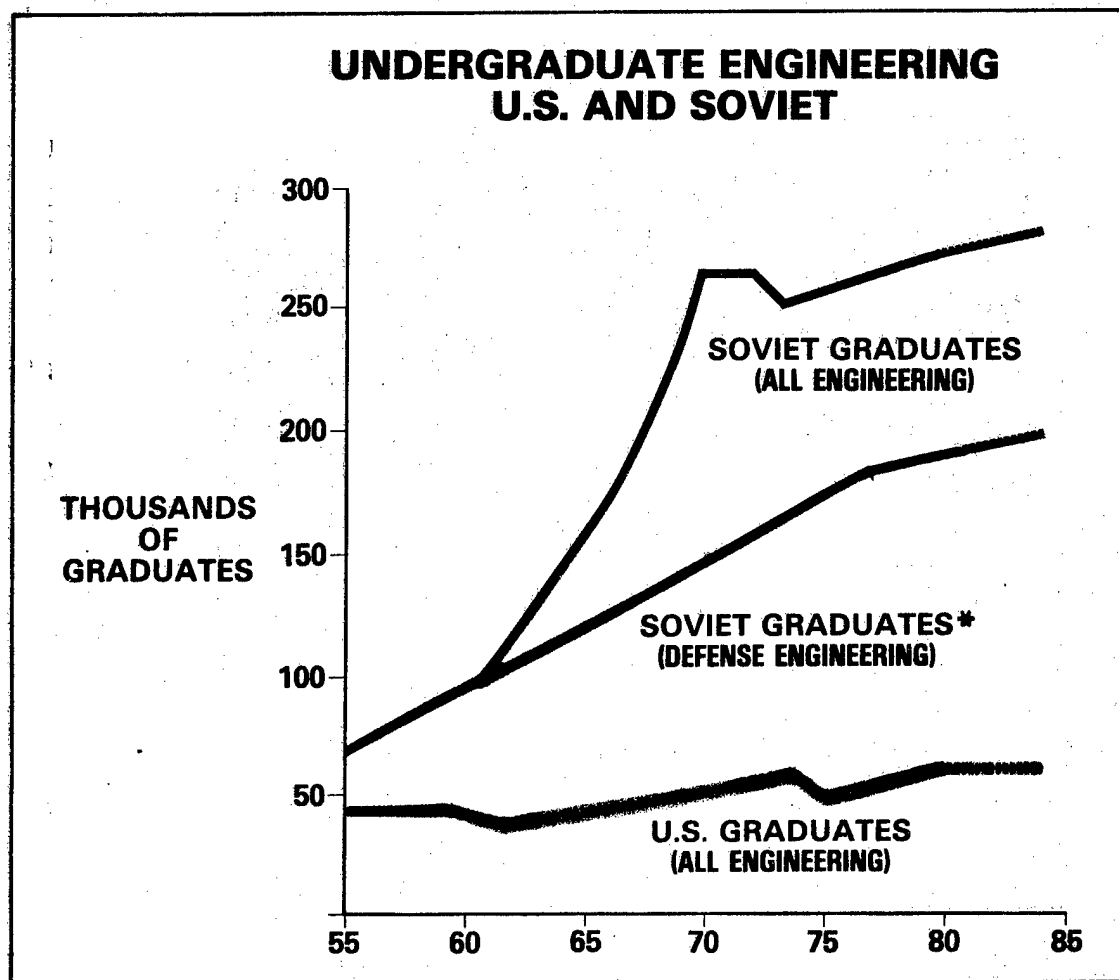
THERE ARE MANY DOCUMENTED CASES WHERE THE SOVIETS AND THEIR ALLIES HAVE USED DIRECT ESPIONAGE TO OBTAIN VITAL TECHNICAL INFORMATION. THESE REPRESENT ONLY THE TIP OF THE ICEBERG IN TERMS OF THE TECHNOLOGY OBTAINED FROM OPEN SOURCES AND QUASI-LEGAL MEANS. IT IS VERY DIFFICULT IN AN OPEN DEMOCRATIC SOCIETY TO ATTEMPT TO RESTRICT WIDE DISTRIBUTION OF TECHNICAL INFORMATION. BUT WHEN TECHNICAL AREAS DIRECTLY BENEFITTING THE SOVIET'S WARFIGHTING CAPABILITY ARE OPENLY PUBLISHED AND DISCUSSED, CAUTION MUST BE EXERCISED.



FOR EXAMPLE, THE SOVIETS ARE ACTIVELY PURSUING DETAILS ON SPECIAL MATERIALS, NOTABLY THE COMPONENTS USED IN THE NOSECONES AND ROCKET MOTORS OF OUR ICBMS. THE PICTURE ABOVE SHOWS A SOVIET REENTRY VEHICLE THAT WOULD UTILIZE OUR NOSE-CONE TECHNOLOGY. IF THEY CAN "STEAL" THIS KNOWLEDGE FROM THE WEST, IT WILL SAVE THEM YEARS OF ORIGINAL DEVELOPMENTAL EFFORT. I STRONGLY SUPPORT THE ADMINISTRATION'S EFFORTS TO ESTABLISH A PROGRAM FOR CAREFUL REVIEW AND CONTROL OF KEY WESTERN TECHNOLOGY TO PREVENT THE SOVIET MILITARY FROM BECOMING STRONGER AS A RESULT OF THE DYNAMIC TECHNICAL GROWTH OF THE FREE WORLD.

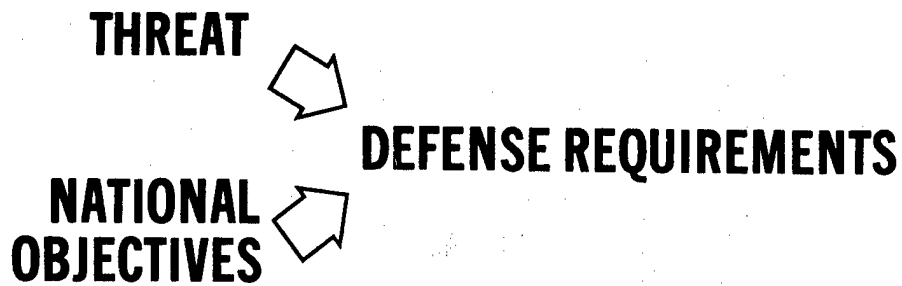
IN ADDITION TO TECHNOLOGICAL PLAGIARISM, THE SOVIETS ARE DEVOTING A TREMENDOUS EFFORT TO IMPROVING THEIR IN-HOUSE TECHNOLOGICAL CAPABILITY BY WAY OF SIGNIFICANT EMPHASIS ON THE SCIENCES THROUGHOUT THEIR EDUCATIONAL SYSTEM.

THE CHART BELOW DEPICTS THE SOVIETS THRUST TO PRODUCE ENGINEERS. THE U.S. GRADUATES A TOTAL OF ABOUT 50,000 ENGINEERS ANNUALLY; THE SOVIETS GRADUATE OVER 250,000, WITH ABOUT 200,000 GOING INTO MILITARY ORIENTED WORK.



THE U.S. STILL ENJOYS A TECHNOLOGICAL ADVANTAGE, BUT WE CANNOT REST ON OUR LAURELS AND TAKE CONTINUED TECHNOLOGICAL LEADERSHIP FOR GRANTED. WE CANNOT CONTINUE TO ASSUME THAT TECHNOLOGICAL SUPERIORITY IS AN AMERICAN BIRTHRIGHT. THE SOVIET UNION IS MAKING A DETERMINED AND, IN MANY AREAS, A SUCCESSFUL EFFORT TO REDUCE OR EVEN OVERCOME OUR TECHNOLOGICAL LEADS--AND WHERE THEY CAN'T DEVELOP IT, THEY STEAL IT! SO IT IS ESSENTIAL THAT WE EXPLOIT OUR UNIQUE TALENTS AS A FREE SOCIETY TO COUNTER THE SOVIET THREAT WITH HIGHLY CAPABLE AND RELIABLE ADVANCED SYSTEMS--RATHER THAN TRYING TO MATCH THEM ON A ONE-FOR-ONE BASIS.

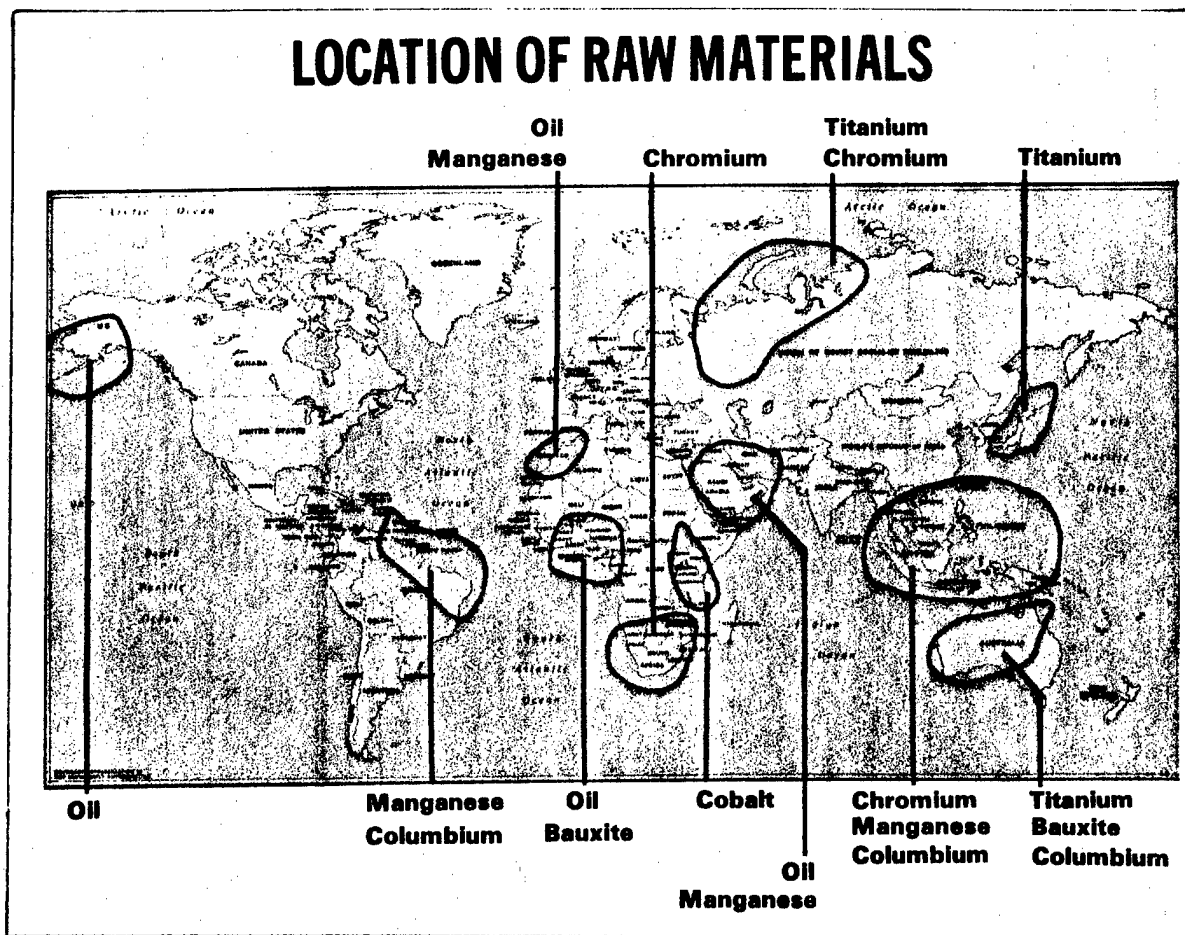
THIS REQUIRES A CONTINUED COMMITMENT TO RESEARCH AND DEVELOPMENT PROGRAMS TO EXPLORE AND EXPLOIT NEW TECHNOLOGIES.



NOW I WILL TURN TO THE OTHER FACTOR THAT DRIVES DEFENSE REQUIREMENTS - NATIONAL OBJECTIVES.

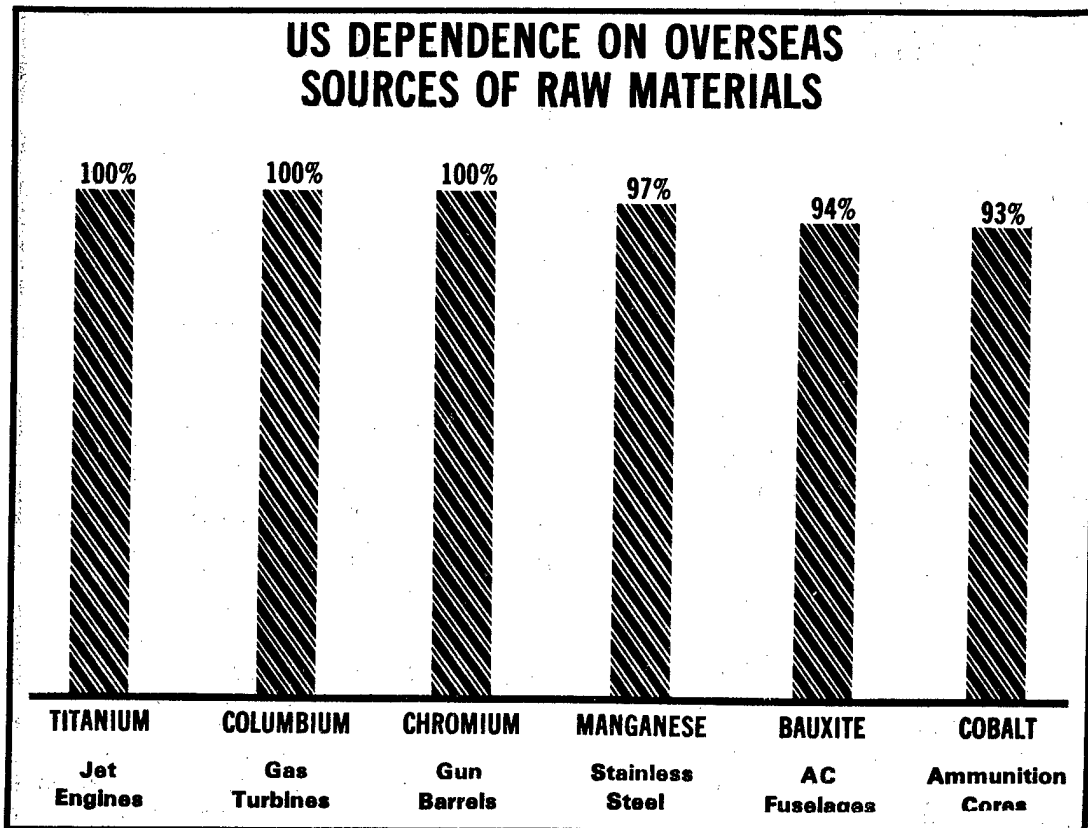
NATIONAL OBJECTIVES ARE NOT WRITTEN DOWN IN A CLEAR CONCISE FORM. KEEPING AMERICA FREE FROM FOREIGN DOMINATION AND MAINTAINING OUR STANDARD OF LIVING COULD BE CITED AS LONG-TERM NATIONAL OBJECTIVES.

LONG-TERM NATIONAL OBJECTIVES ARE EASIER TO ARTICULATE THAN NEAR-TERM. NEAR-TERM NATIONAL OBJECTIVES ARE OFTEN SUBSETS OF THE LONG-TERM OBJECTIVES; FOR EXAMPLE, INSURING THAT THE FREE WORLD HAS ACCESS TO AN ADEQUATE OIL SUPPLY. THE NEAR-TERM OBJECTIVES TEND TO BE DRIVEN BY EXPEDIENCE AND CURRENT SITUATIONS. AN EXAMPLE OF THIS IS OUR DEPENDENCE ON FOREIGN ENERGY RESOURCES AND STRATEGIC MATERIALS AS SHOWN ON THE MAP BELOW.

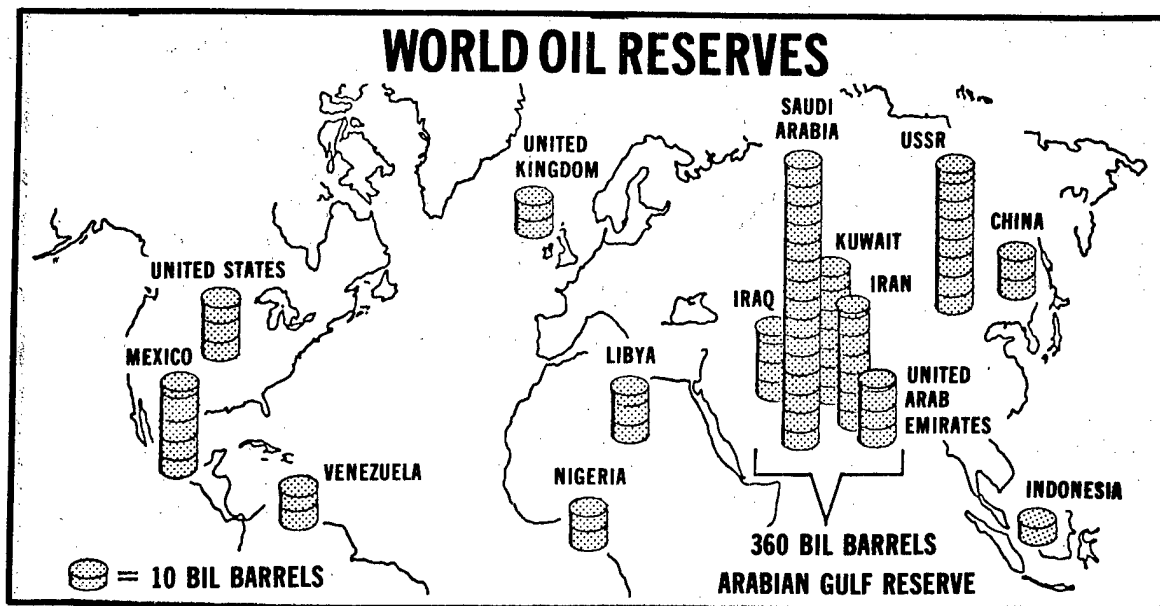


BECAUSE OF POLITICAL AND ECONOMIC FORCES IT IS IN THE BEST INTEREST OF THE U.S. TO MAINTAIN TRADE WITH THESE AND OTHER REGIONS OF THE WORLD. THE LOSS OF ACCESS TO CERTAIN CRITICAL MATERIALS WOULD HAVE A SEVERE IMPACT UPON THE ECONOMIES OF NOT ONLY THE U.S., BUT ALSO OUR ALLIES.

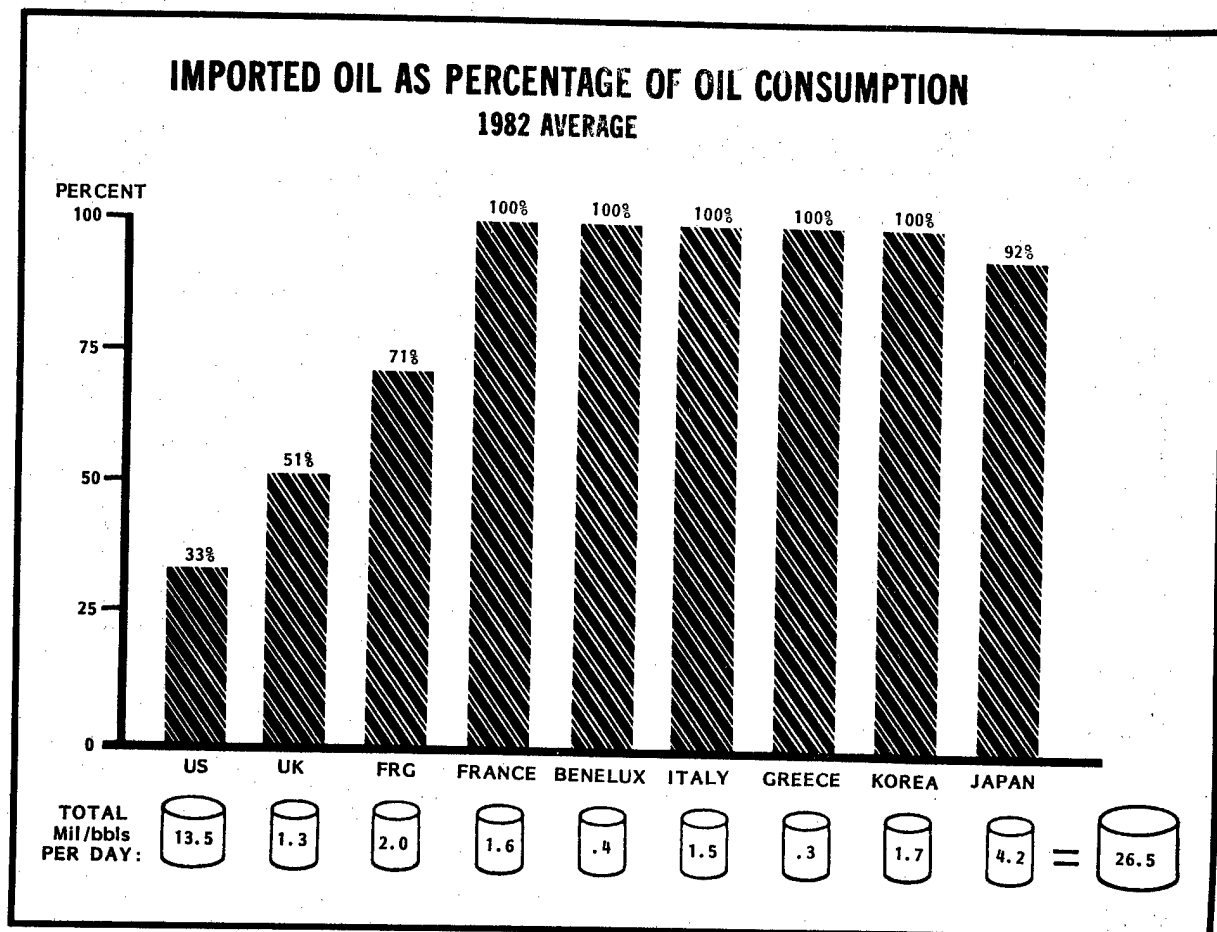
WE HAVE DEVELOPED A SIGNIFICANT DEPENDENCE ON FOREIGN SOURCES FOR RAW MATERIALS. THE FOLLOWING CHARTS REFLECT THE TYPE AND SIGNIFICANCE OF THIS DEPENDENCE. THE CHART BELOW, WHICH REFLECTS THE PERCENTAGE OF IMPORTS REQUIRED, PUTS INTO PERSPECTIVE THE "VITAL NATURE" OF RAW MATERIALS CRITICAL TO OUR DEFENSE REQUIREMENTS.



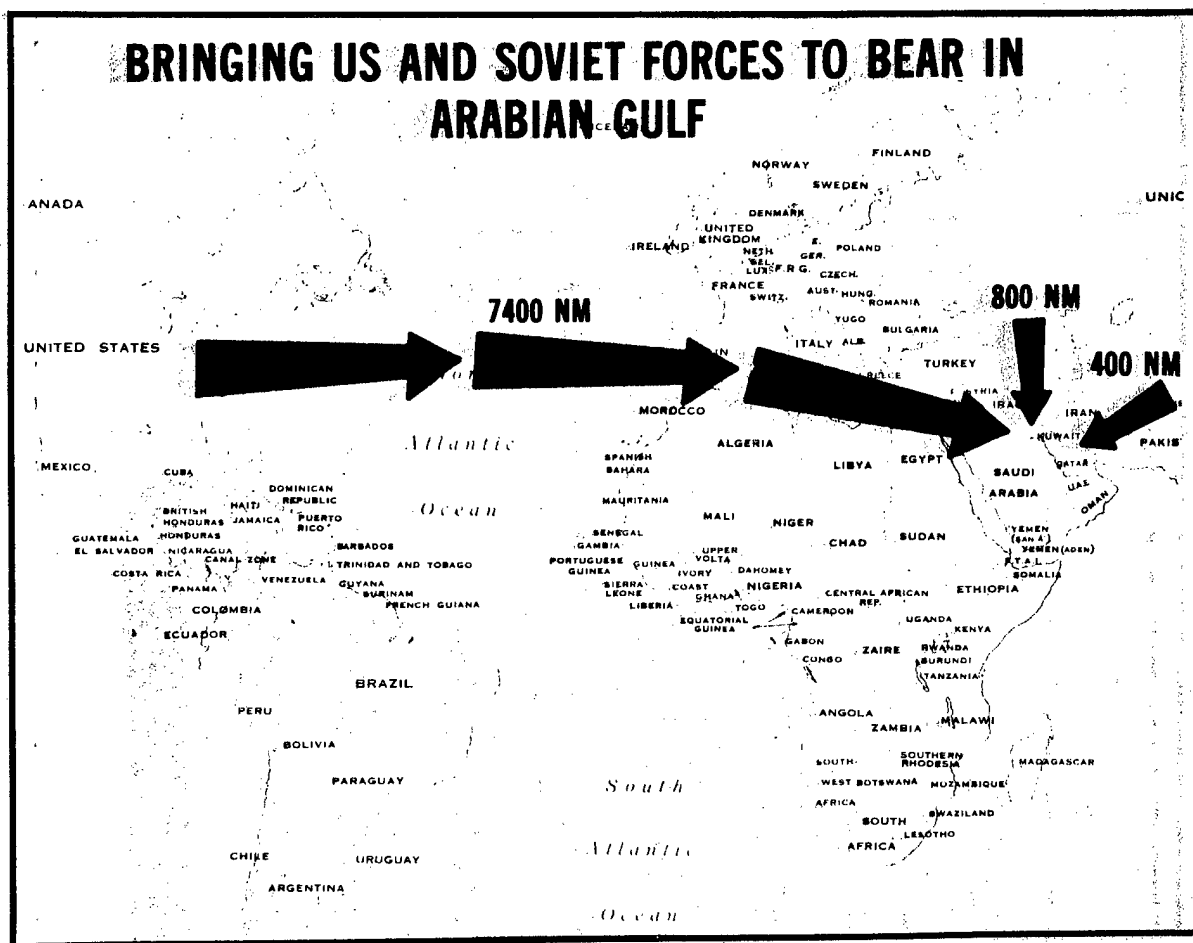
AS YOU KNOW, WE HAVE A SIGNIFICANT DEPENDENCE ON FOREIGN OIL -- A DEPENDENCE WHICH IS DECREASING BUT WHICH STILL REMAINS TODAY. HERE YOU SEE THAT A VAST PERCENTAGE OF THE WORLD'S CRUDE OIL RESERVES ARE IN THE ARABIAN GULF.



COMPARING RESOURCES TO NEED, WE IMPORT MORE THAN 30% OF OUR DAILY CONSUMPTION AS SHOWN ON THE CHART BELOW. NOTE HOW VITAL THESE OIL RESERVES ARE TO MANY OF OUR CLOSE ALLIES.



IN TERMS OF THE WORLD'S MOST VITAL RESOURCE AT THIS TIME -- OIL, THE SOVIETS ENJOY AN ADVANTAGE BY VIRTUE OF THEIR PROXIMITY TO THE MIDDLE EAST AS SHOWN ON THE MAP BELOW.



IF THIS OIL SUPPLY WERE SHUT OFF, IT WOULD REQUIRE AN IMMEDIATE, DRASTIC REDISTRIBUTION OF WORLD OIL SUPPLIES TO MAINTAIN MINIMUM ESSENTIAL FUNCTIONS. IT WOULD HAVE A DISASTROUS EFFECT ON THE ECONOMY OF THE WEST.

WESTERN ACCESS TO THE OIL-PRODUCING COUNTRIES OF THE PERSIAN GULF AND THE FREE, INTERNATIONAL STATUS OF THE STRAITS OF HORMUZ MUST BE MAINTAINED. THIS UNDERSCORES THE NEED FOR A MAJOR EXPANSION OF OUR AIRLIFT AND SEALIFT FORCES, BECAUSE WE DO NOT HAVE SUFFICIENT FORCES STATIONED IN THE PERSIAN GULF AREA TO STOP ANY SIZEABLE AGGRESSION.

AIR FORCE REQUIREMENTS

- RESTORE ADEQUATE STRATEGIC AND THEATER NUCLEAR BALANCE
- DENY SOVIETS ANY PROSPECT OF VICTORY IN NUCLEAR CONFLICT
- FLEXIBLE EMPLOYMENT TO FULFILL MULTIPLE THEATER MISSIONS
- POSSESS SUFFICIENT RANGE AND AERIAL REFUELING CAPABILITY
- CONDUCT OPERATIONS AT NIGHT AND IN ADVERSE WEATHER CONDITIONS
- PENETRATE SOVIET DEFENSES TO DESTROY HEAVILY DEFENDED TARGETS
- READY AND CAN FIGHT AS LONG AND HARD AS NEEDED TO WIN

THIS CHART LISTS AIR FORCE REQUIREMENTS TO RESTORE THE NUCLEAR BALANCE AND ASSURE THAT THE SOVIETS WILL NEVER THINK THEY COULD WIN A NUCLEAR WAR. WE ARE PLANNING TO DEPLOY MX MISSILES, B-1B BOMBERS, AND AIR AND GROUND LAUNCHED CRUISE MISSILES. WE ARE ALSO IMPROVING OUR COMMAND AND CONTROL COMMUNICATIONS AND INTELLIGENCE SYSTEMS AND UPGRADING OUR HOMELAND DEFENSES THROUGH IMPROVED WARNING SYSTEMS AND DEPLOYMENTS OF AWACS AIRCRAFT AND F-15 INTERCEPTORS.

WE MUST DEVELOP AND MAINTAIN THE FORCES NEEDED FOR THEATER MISSIONS--INCLUDING THE POTENTIAL NEED TO SIMULTANEOUSLY FIGHT IN MORE THAN ONE THEATER. TO PROVIDE THE CAPABILITY TO DEPLOY ANYWHERE IN THE WORLD, EVEN WHEN WE CAN'T USE EN ROUTE BASES, WE ARE PROCURING ADDITIONAL C-5S AND KC-10S, AND WE ARE REENGINEING OUR FLEET OF KC-135 TANKERS. WE ARE ALSO CONTINUING THE DEVELOPMENT OF THE C-17, WHICH WILL COMPLEMENT AND EXPAND OUR PRESENT FORCE PROJECTION CAPABILITY.

WE SHOULD BE ABLE TO OPERATE AT NIGHT AND IN ADVERSE WEATHER TO MAKE MAXIMUM USE OF OUR FORCES AND DENY THE ENEMY ANY SAFE OPERATING ENVIRONMENT. TO IMPROVE OUR AIR-TO-GROUND CAPABILITY, WE ARE EVALUATING IMPROVED VERSIONS OF THE F-15 AND F-16. WE PLAN TO PROCURE ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILES AND OTHER ADVANCED WEAPONS TO IMPROVE THE EFFECTIVENESS OF EACH AIRCRAFT SORTIE.

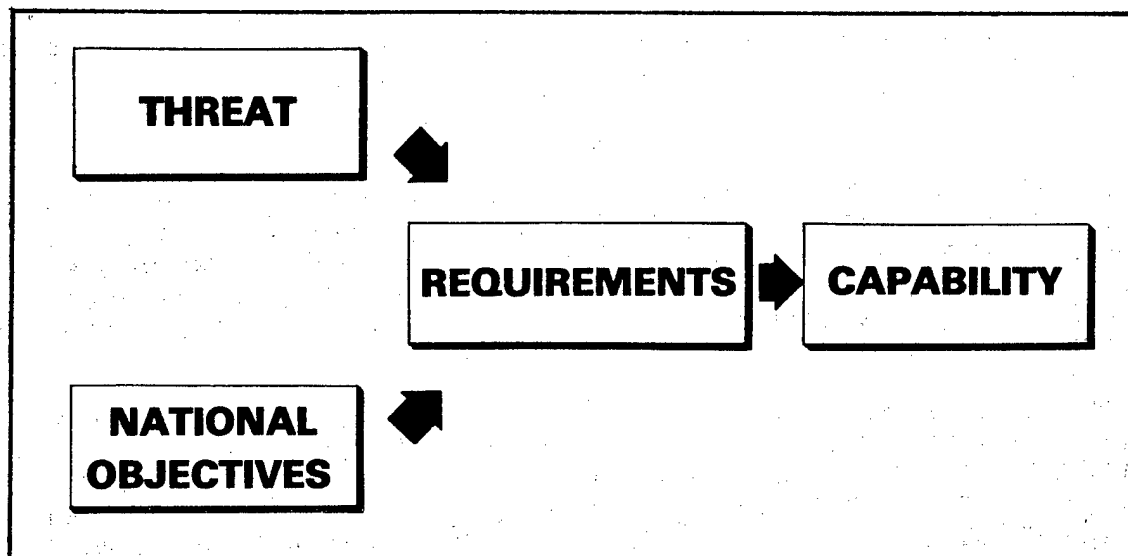
FURTHERMORE, SO THE SOVIETS WILL KNOW THE THINGS THEY VALUE MOST WILL BE AT RISK IN A WAR, WE MUST BE ABLE TO PENETRATE THEIR DEFENSES AND DESTROY HEAVILY DEFENDED TARGETS. OUR CONTINUED IMPROVEMENTS IN ELECTRONIC COUNTERMEASURES AND OUR STEALTH TECHNOLOGY CONTRIBUTE TO SATISFYING THESE REQUIREMENTS.

IN SUM, WE NEED THE PEOPLE AND FORCES REQUIRED SO WE ARE READY AND ABLE TO FIGHT AS LONG AND AS HARD AS IT TAKES TO WIN. WE DON'T WANT TO FIGHT, BUT IF WE SATISFY THESE REQUIREMENTS IN THE EYES OF THE SOVIETS, WE WILL DETER ACTIONS WHICH THREATEN OUR VITAL INTERESTS AND PROTECT OUR FREEDOM WITHOUT USE OF FORCE.

WHEN THE ELECTED LEADERSHIP DECIDES IT IS IN THE NATIONAL INTEREST TO HAVE A CAPABILITY TO INFLUENCE A SITUATION OR THE BEHAVIOR OF A NATION OR NATIONS, OR TO RETAIN ACCESS TO CRITICAL MATERIALS ESSENTIAL FOR OURSELVES AND OUR ALLIES, THE MILITARY IS OFTEN CALLED UPON TO PROVIDE OR CONTRIBUTE TO THIS INFLUENCE AND CAPABILITY. IT IS IN SUPPORT OF REQUIREMENTS LEVIED ON THE MILITARY IN SUPPORT OF NATIONAL OBJECTIVES BOTH NEAR AND FAR TERM THAT MILITARY PROGRAMS ARE DEVELOPED AND BUILT.

HOWEVER, THE DETERMINATION OF THE NATIONAL OBJECTIVES IS NOT WITHIN THE PURVIEW OF THE MILITARY. ALTHOUGH OUR COUNSEL IS SOMETIMES SOUGHT, IT IS THE RESPONSIBILITY OF THE ELECTED OFFICIALS TO FORMULATE POLICY IN THIS AREA. IT IS OUR RESPONSIBILITY TO EXAMINE THE DIRECTED POLICY AND DEVELOP THE CAPABILITY TO SUPPORT THIS POLICY MILITARILY, IF AND WHEN REQUIRED.

REFLECTED BELOW IS A RECAP OF THOSE FACTORS WHICH DRIVE DEFENSE REQUIREMENTS. THE JOB OF THE DEFENSE DEPARTMENT IS TO COUNTER THE THREAT AND CONSIDER THE NATIONAL OBJECTIVES AND MOLD THESE INTO DEFENSE REQUIREMENTS. THE PROCUREMENT OF HARDWARE AND THE TRAINING AND FIELDING OF MEN TRANSLATE THESE REQUIREMENTS INTO MILITARY CAPABILITY.



MY MESSAGE TO THIS POINT IS THAT THE SOVIET UNION AND HER WARSAW PACT ALLIES ARE BUILDING AND EXPANDING THEIR MILITARY CAPABILITY AT AN ALARMING RATE. IF FOR BUDGETARY REASONS, OR FOR ANY OTHER REASON, WE AS A COUNTRY CHOOSE NOT TO PURSUE THE PROGRAMS NEEDED TO SATISFY OUR DEFENSE REQUIREMENTS, WE MUST EITHER ADJUST OUR NATIONAL OBJECTIVES OR FACE UP TO THE FACT THAT WE WON'T HAVE THE CAPABILITY TO SUPPORT THEM.

DOES THIS MEAN THAT THE U.S. MUST MAKE TREMENDOUS SACRIFICES IN TERMS OF SOCIAL PROGRAMS AND CHANGES IN OUR STANDARD OF LIVING TO COUNTER THE GROWING THREAT? CRITICS OF DEFENSE SPENDING WOULD LEAD YOU TO BELIEVE THAT THIS IS THE CASE, BUT A CLOSE EXAMINATION OF THE FACTS MAY LEAD ONE TO A DIFFERENT CONCLUSION.

HEADLINES

COST OVERRUNS!

**OUT OF CONTROL
DEFENSE BUDGET!**

DEFENSE SPENDING GONE WILD!

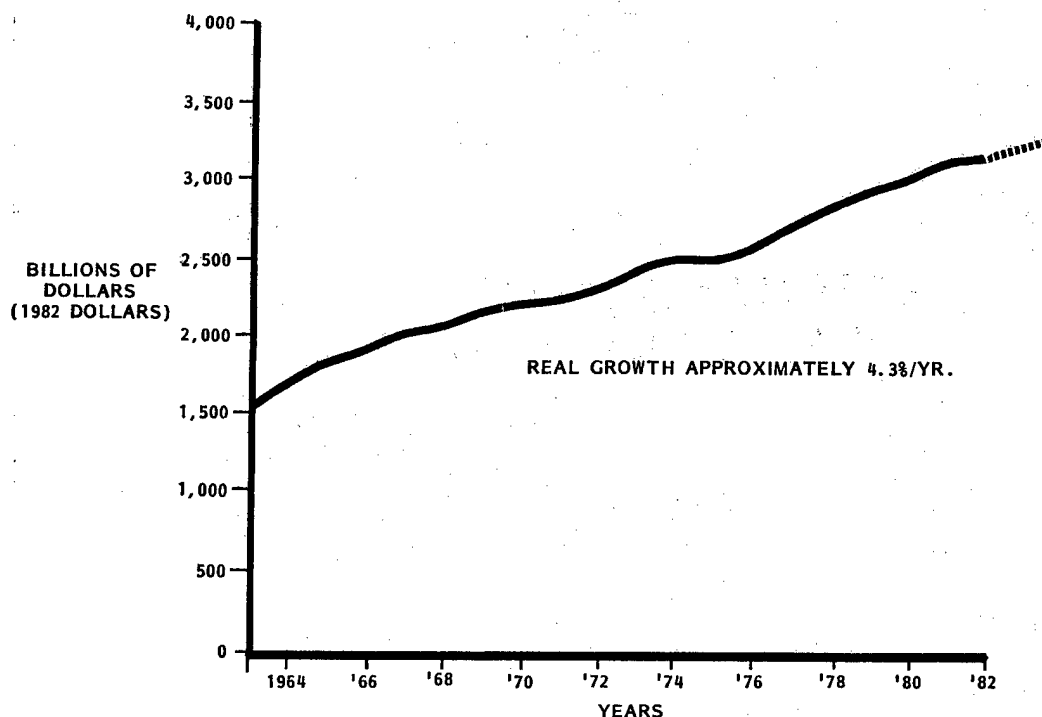
**GOLD PLATING
UNNEEDED
UNNECESSARY**

THE HEADLINES DISPLAYED HERE ARE JUST A REPRESENTATIVE SAMPLE OF THE TYPE USED BY DEFENSE CRITICS. CONSTRUCTIVE CRITICISM AND SCRUTINY IS HEALTHY, AND I CERTAINLY ENDORSE A CAREFUL REVIEW PROCESS, BOTH IN THE OPEN FORUM OF THE MEDIA AND IN CONGRESS. THE PROBLEM COMES WHEN THE CRITICS FAIL TO EXAMINE DEFENSE COSTS IN CONTEXT WITH THE THREAT, NATIONAL OBJECTIVES, AND THE REST OF THE ECONOMY. THE TYPICAL ATTACK ON DEFENSE SPENDING OFTEN USES LARGE DOLLAR FIGURES FOR THEIR SHOCK VALUE AND INFER THAT THE DEFENSE PROGRAM IS A HELTER SKELTER ARRANGEMENT WITH NO PURPOSE OR DIRECTION. IN ACTUALITY THE DEFENSE DEPARTMENT IS ONE OF GOVERNMENTS MOST SCRUTINIZED, CLOSELY MANAGED AGENCIES.

AN EXAMINATION OF THE TRENDS IN THE U.S. ECONOMY AND DEFENSE SPENDING WILL SHED SOME LIGHT ON THE TRUE STATE OF AFFAIRS.

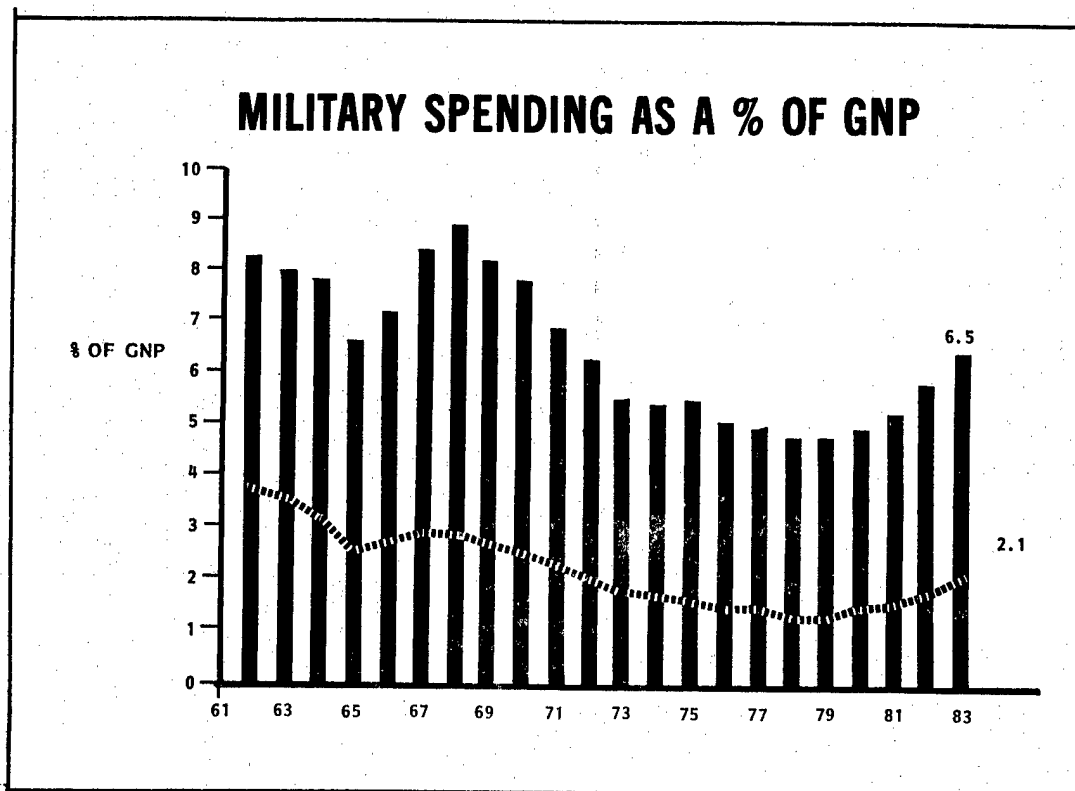
ECONOMISTS HAVE COME UP WITH A NUMBER OF MEASURES TO EVALUATE THE PERFORMANCE OF NATIONAL ECONOMIES. ONE GENERALLY ACCEPTED MEASURE IS THE GROSS NATIONAL PRODUCT (GNP). SHOWN ON THE CHART THAT FOLLOWS IS THE GNP OF THE UNITED STATES IN TWO YEAR INCREMENTS. QUITE SIMPLY, WE HAVE ENJOYED A RELATIVELY CONSTANT GROWTH. THE WORDS "REAL GROWTH" MEAN THE EFFECTS OF INFLATION HAVE BEEN REMOVED. WHILE MINOR FLUCTUATIONS RECEIVE WIDE MEDIA COVERAGE, FEW WOULD DISAGREE THAT THE ECONOMY HAS EXPANDED SINCE THE 60s.

GROSS NATIONAL PRODUCT (GNP)



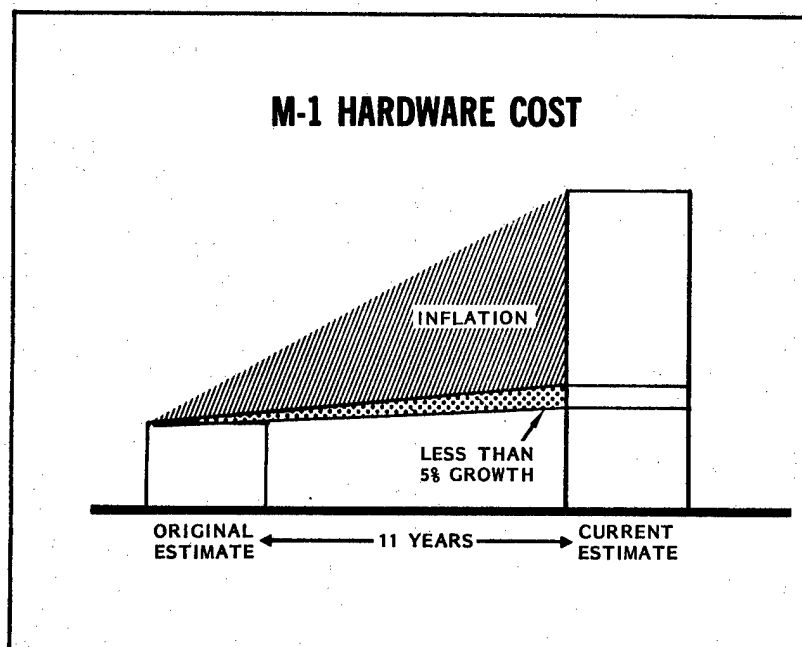
THE GNP ALLOWS US TO DO A COMPARATIVE ANALYSIS OF RESOURCES DEVOTED TO DIFFERENT ASPECTS OF THE ECONOMY OVER TIME. DEFENSE SPENDING IS A CASE IN POINT: IT HAS BEEN A RELATIVELY SMALL PORTION OF THE NATION'S OUTPUT CAPABILITY, EVEN DURING TIMES OF CONFLICT. WHILE THE FY 83 DEFENSE BUDGET IS LARGE AT 6 PERCENT OF THE GNP, IT MUST BE ASKED--RELATIVE TO WHAT? UNDER PRESIDENT EISENHOWER IT WAS 9 PERCENT OF GNP; UNDER PRESIDENT KENNEDY, PRIOR TO VIETNAM, IT WAS 8 PERCENT. DEFENSE SPENDING IN THE USSR WILL CLAIM APPROXIMATELY 15 PERCENT OF THEIR GNP. AT THAT RATE, EVEN THE PRESIDENT'S PLANNED INCREASES IN THE DEFENSE BUDGET WILL NOT CLOSE THE GAP BETWEEN SOVIET AND U.S. MILITARY INVESTMENT.

FOR A PERIOD OF 11 YEARS, THE PERCENTAGE OF THE GNP GOING TO DEFENSE STEADILY DECLINED. IN COMPARISON TO THE TOTAL GNP, THE PERCENTAGE GOING TO DEFENSE IS RELATIVELY SMALL. AS INDICATED ON THE FOLLOWING CHART, THE AIR FORCE'S TOTAL PERCENTAGE OF THE GNP IN 1983 IS 2.1%: WHILE THE TOTAL DEFENSE DEPARTMENT'S SHARE IS APPROXIMATELY 6.5%. WITHIN THE AIR FORCE'S 2.1%, WE MUST MODERNIZE THE STRATEGIC FORCE, MAINTAIN AND IMPROVE THE SUSTAINABILITY, RELIABILITY, AND READINESS OF THE CURRENT FORCES, AND PROCURE SYSTEMS CAPABLE OF DETERING AND, IF NECESSARY, DEFEATING A STEADILY INCREASING THREAT.



DEFENSE CRITICS, HOWEVER, HAVE FOUND THAT USING THE PERCENTAGE FIGURES IN TERMS OF THE GNP ARE NOT AS DRAMATIC AS USING "BILLIONS OF DOLLARS" WHEN DISCUSSING THE COST OF DEFENSE PROGRAMS - AND IN SO DOING THEY DO NOT HONESTLY REFLECT THE INFLATIONARY FACTORS WHICH AFFECT THE COST OF DOING BUSINESS.

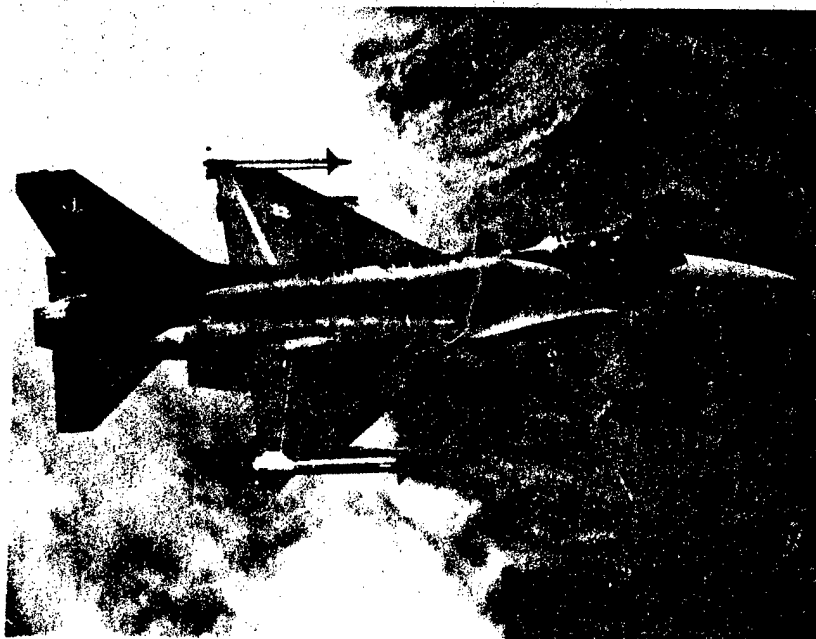
THE CHART BELOW SHOWS AN EXAMPLE OF HOW INFLATION HAS AFFECTED A DEFENSE PROGRAM. WHEN THE ARMY'S M-1 TANK WAS FIRST PROPOSED, IT WAS ESTIMATED EACH TANK WOULD COST APPROXIMATELY HALF A MILLION DOLLARS. THE COST TODAY IS CLOSE TO TWO MILLION DOLLARS. CRITICS ARE QUICK TO LABEL THIS AS AN EXAMPLE OF MISMANAGEMENT; BUT WHEN THE COST INCREASES ARE BROKEN OUT, IT CAN BE SEEN THAT THE MAJOR CULPRIT WAS THE IMPACT OF INFLATION. PROGRAM CHANGES AND NON-INFLATION COST GROWTH WERE SMALL BY COMPARISON.



FORECASTING INFLATION IS A VERY DIFFICULT TASK. IT IS ESPECIALLY HARD FOR DEFENSE RELATED HARDWARE BECAUSE OF THE MATERIALS AND SPECIALIZED TECHNOLOGY THAT ARE REQUIRED. THE INFLATION FIGURES FOR DEFENSE RELATED ITEMS CONSISTENTLY EXCEED THE NATIONAL AVERAGE.

ONE CRITIC OF DEFENSE SPENDING RECENTLY POINTED OUT THAT IN 1967 IT WAS POSSIBLE TO BUY AN M-60 TANK (THE PREDECESSOR OF THE M-1) FOR A MERE \$198,000. THIS HE COMPARED TO THE TWO MILLION DOLLAR COST OF THE M-1 TODAY. WHAT HE FAILED TO POINT OUT WAS THAT IT WOULD COST CLOSE TO 1.8 MILLION DOLLARS TO BUILD A M-60 TODAY, SO HIS SUGGESTION OF RUNAWAY COSTS WAS NOT VALID. ANOTHER CRITIC PUBLISHED AN EDITORIAL, "THE PENTAGON'S HIGH-TECH ROLLERS", IN A LEADING SYNDICATED COLUMN WHICH PRESENTED UNSUBSTANTIATED AND LARGELY INACCURATE ANALYSIS OF RECENT CONFLICTS IN LEBANON AND THE FALKLAND ISLANDS.

THE PURPORTED FACTS WHICH THE EDITORIAL PRESENTED EXAGGERATED THE COST GROWTH PROBLEM. FOR EXAMPLE, THE EDITORIAL STATED THAT THE F-16, AS SHOWN BELOW, COST NINE TIMES MORE THAN THE ORIGINAL COST ESTIMATE--A DISTURBING BUT ALSO MIS-LEADING FIGURE.

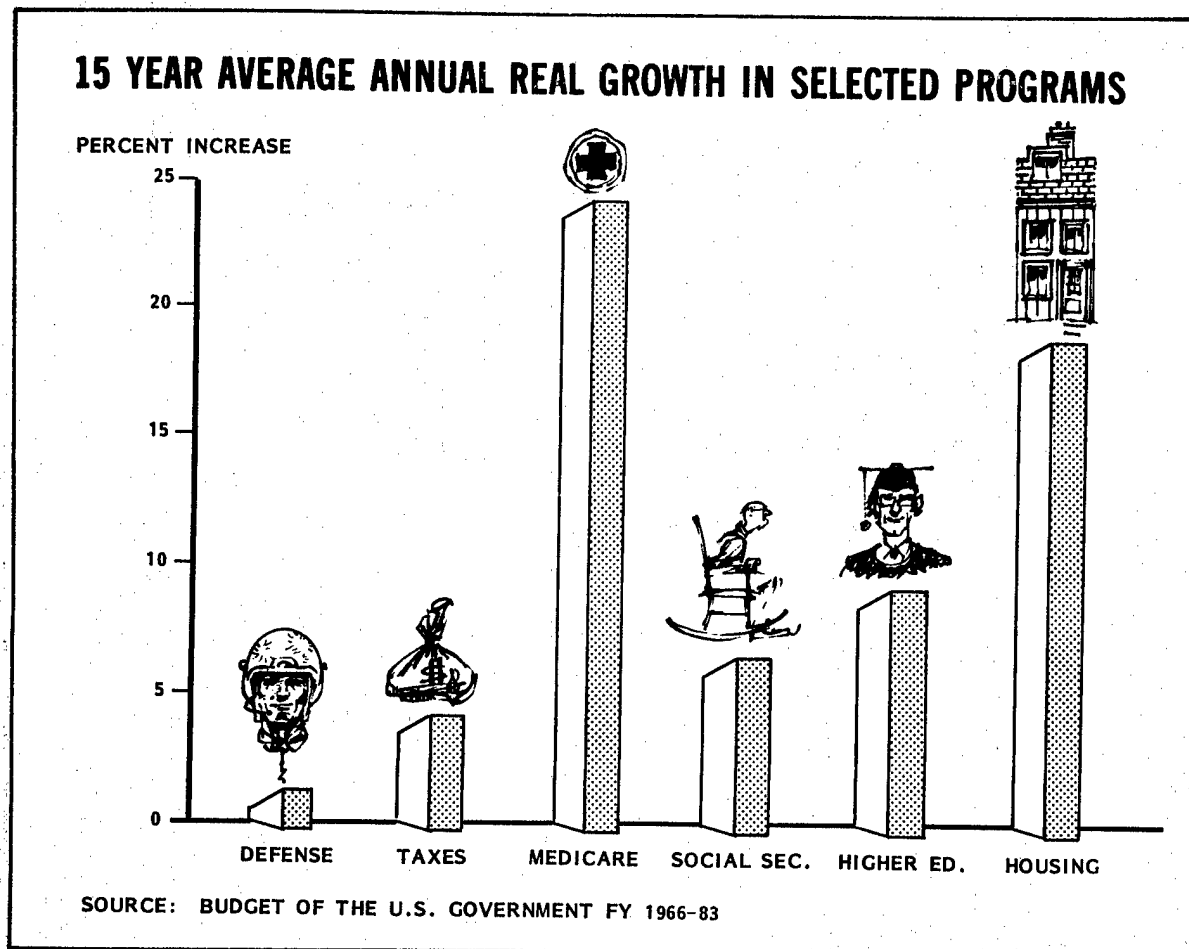


THIS COST FIGURE MUST BE PLACED IN CONTEXT TO BE UNDERSTOOD. THE ORIGINAL F-16 PROGRAM COST ESTIMATE WAS BASED ON THE TOTAL COST TO PROCURE 650 AIRCRAFT. BECAUSE THE F-16 HAS PROVEN TO BE VERY EFFECTIVE AND RELIABLE, THE AIR FORCE NOW PLANS TO BUY APPROXIMATELY 2165 F-16S THROUGH 1990. THIS OVER THREEFOLD QUANTITY INCREASE ACCOUNTS FOR A THIRD OF THE REPORTED NINE-FOLD COST GROWTH FOR THE PROGRAM. INFLATION ACCOUNTS FOR THE BULK OF THE REMAINING F-16 COST GROWTH. CALCULATED IN BASE YEAR (1975) DOLLARS, THE UNIT PRICE OF THE F-16 HAS INCREASED SLIGHTLY OVER 20%--MORE THAN WE LIKE, BUT A FAR CRY FROM THE EXAGGERATED CLAIMS IN THE EDITORIAL. THE BULK OF THIS INCREASE IS DUE TO IMPROVEMENTS IN THE DESIGN OF THE AIRCRAFT AND WE HAVE A MORE CAPABLE AIRPLANE AS A RESULT. IN USING THESE EXAMPLES, I DO NOT SUGGEST THAT CAREFUL MANAGEMENT OF DEFENSE PROGRAMS IS NOT REQUIRED; IN FACT, WE ARE CONSTANTLY TRYING TO IMPROVE OUR MANAGEMENT TECHNIQUES TO REDUCE COSTS.

AN EXAMPLE OF THIS IS OUR PUSH FOR MULTIPLE YEAR CONTRACTS WITH COMMERCIAL COMPANIES SO THAT MORE EFFICIENT PROCUREMENT PRACTICES MAY BE ESTABLISHED, THEREBY REDUCING THE COST TO THE GOVERNMENT.

SOME CRITICS OF THE BUDGET WOULD HAVE US BELIEVE THAT THE CULPRIT IN THE FEDERAL DEFICIT IS CAUSED BY DEFENSE SPENDING. AS WAS SHOWN ON PREVIOUS CHARTS THE SHARE FOR DEFENSE HAS BEEN RELATIVELY CONSTANT. IN FACT, AS A PROGRAM, DEFENSE HAS GROWN AT A VERY LOW RATE.

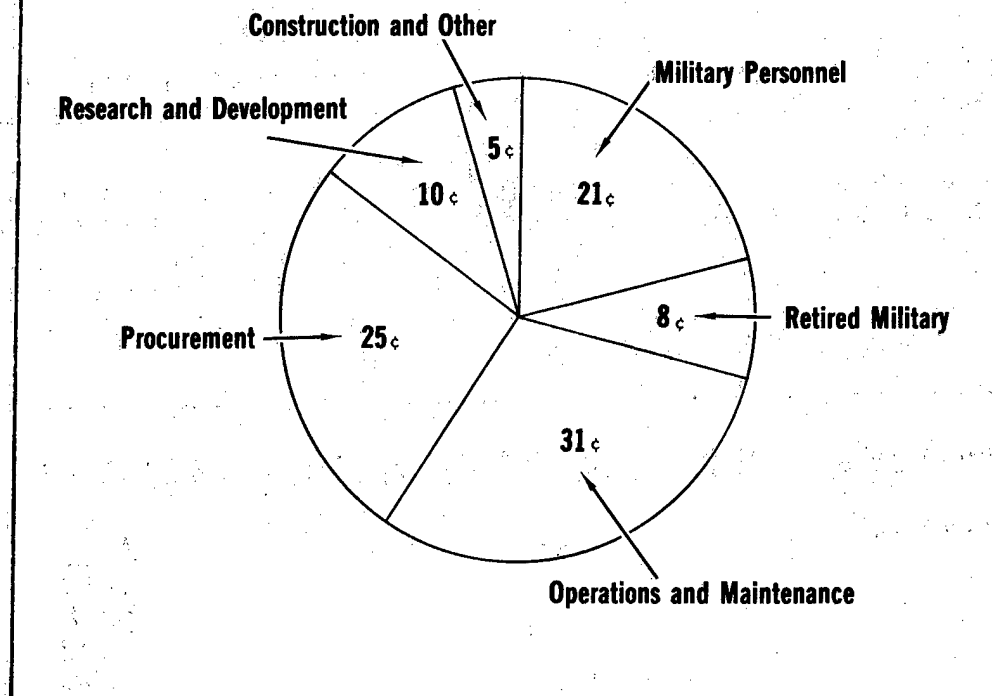
THE CHART BELOW SHOWS THE FIFTEEN YEAR AVERAGE ANNUAL REAL GROWTH IN SEVERAL SEGMENTS OF GOVERNMENT SPENDING. COMPARED TO TAX RECEIPTS AND EXPENDITURES IN MEDICARE, HOUSING ASSISTANCE, HIGHER EDUCATION, AND SOCIAL SECURITY, THE GROWTH IN DEFENSE HAS BEEN SMALL. I AM NOT QUESTIONING OR ATTACKING THE NEED FOR SOCIAL SERVICE PROGRAMS. ALL I AM POINTING OUT IS THAT BY COMPARISON, WE AS A NATION DO NOT ALWAYS PUT OUR GREATEST EMPHASIS ON DEFENSE.



ANOTHER POPULAR CLICHE USED BY CRITICS OF DEFENSE SPENDING IS THAT THE BUDGET CONTAINS DOLLARS TO BUY MASSIVE NUMBERS OF MILITARY "TOYS" FOR THE GENERALS TO PLAY WITH, AND THAT IF THESE PROCURMENT PROGRAMS WERE CUT IT WOULD RESULT IN DRAMATIC SAVINGS. WHEN THE BREAKOUT OF THE DEFENSE DOLLAR IS EXAMINED, IT CAN BE SEEN THAT THIS IS NOT THE CASE.

WHERE THE DEFENSE DOLLAR GOES

1983



BECAUSE THE U.S. HAS MADE THE DECISION TO HAVE A VOLUNTEER FORCE INSTEAD OF A CONSCRIPT ARMY, WE SPEND NEARLY 30 PERCENT ON PERSONNEL COSTS. THE CHART ABOVE SHOWS THAT THE MAJOR PORTION OF THE DEFENSE DOLLAR GOES TO OPERATIONS, MAINTENANCE, AND ACTIVE DUTY AND RETIRED PAY.

THE PORTIONS DEVOTED TO PROCUREMENT OF WEAPON SYSTEMS (25%) AND RESEARCH AND DEVELOPMENT TO MAINTAIN OUR CRITICALLY IMPORTANT TECHNOLOGY EDGE OVER THE SOVIETS (10%) DO NOT DOMINATE THE BUDGET. HOWEVER, WHEN CUTS MUST BE ABSORBED IN DEFENSE SPENDING, THESE ARE THE AREAS THAT ARE ATTACKED FIRST. BUT THESE ARE THE VERY AREAS WHERE THE INCREASES ARE NEEDED TO COUNTER THE THREAT IN THE FUTURE.

WHEN THE CRITICS OF DEFENSE SPENDING START THROWING AROUND THE BILLION DOLLAR FIGURES ASSOCIATED WITH HARDWARE PROGRAMS, THEY SHOULD ALSO CONSIDER AMERICAN SPENDING PATTERNS.

SEVERAL YEARS AGO ARCADE GAMES WERE CONSIDERED AN ODDITY. THE ENTIRE INDUSTRY CONSISTED OF A LIMITED NUMBER OF MECHANICAL PINBALL MACHINES. THEN THE MICROCHIP AND ASSOCIATED TECHNOLOGY WERE INTRODUCED AND SUDDENLY WE HAD A TREMENDOUS NUMBER OF ELECTRONIC GAMES SUCH AS PACMAN, SPACE INVADERS, AND ASTROBLAST.



THE APPEAL WAS EXPLOSIVE. IN 1981 MORE THAN 5 BILLION DOLLARS, THAT'S TWENTY BILLION QUARTERS, WERE DROPPED INTO COIN OPERATED GAMES. INDUSTRY ESTIMATES THIS AMOUNT WILL GROW DRAMATICALLY. SOME ANALYSTS PROJECT THE ELECTRONIC GAME BUSINESS WILL EXCEED 10 BILLION DOLLARS A YEAR FOR THE NEXT SEVERAL YEARS.

BY NO STRETCH OF THE IMAGINATION COULD THESE GAMES BE CONSIDERED A BASIC NECESSITY. THEY DO NOT FIT INTO THE "BUTTER" CATEGORY. IF THESE FUNDS WERE DIVERTED TO NATIONAL DEFENSE FOR THE NEXT FIVE YEARS, THEY WOULD COME CLOSE TO FULLY FUNDING BOTH THE B-1 AND THE MX MISSILE SYSTEM. IS IT UNREASONABLE TO ASK THIS COUNTRY TO SPEND AS MUCH ON VITAL STRATEGIC PROGRAMS AS WE ARE SPENDING TO PLAY PACMAN, SPACE INVADERS, AND ASTROBLAST?

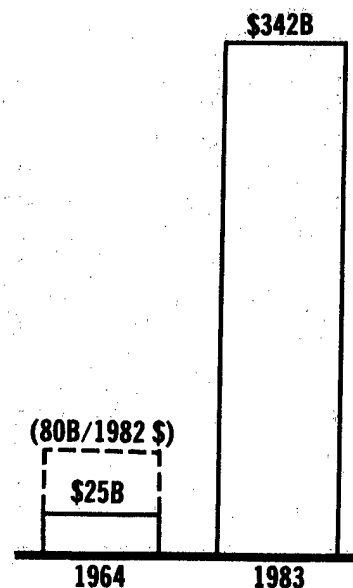
WE AMERICANS HAVE ENJOYED A STANDARD OF LIVING WHICH IS SECOND TO NONE. ONE FACTOR THAT HAS ENHANCED THAT STANDARD IS THE FEDERAL GOVERNMENT'S PAYMENTS FOR HUMAN RESOURCES. CONSISTING OF PAYMENTS FOR SOCIAL SECURITY, MEDICARE, UNEMPLOYMENT ASSISTANCE, AND EDUCATION, HUMAN RESOURCES IS THE LARGEST CATEGORY OF FEDERAL SECTOR EXPENDITURES. SOCIAL SECURITY ACCOUNTS FOR 48.8% OF TOTAL HUMAN RESOURCES PAYMENTS, MEDICARE ACCOUNTS FOR ANOTHER 18%, AND UNEMPLOYMENT ASSISTANCE FOR 7.6%. IN RELATING HUMAN RESOURCES TO DEFENSE, CRITICS WOULD HAVE US BELIEVE THAT HUMAN RESOURCE PAYMENTS HAVE BEEN DECREASING IN ORDER TO SUPPORT AN INCREASED DEFENSE BUDGET. THAT JUST ISN'T SO.

HUMAN RESOURCES PAYMENTS

FY 1983 ESTIMATES (BILLION \$)

● INCOME SECURITY	
INCLUDES:	246.1
● SOCIAL SECURITY	161.9
● UNEMPLOYMENT BENEFITS	34.7
● CIVIL SVC RETIREMENTS	20.8
● FOOD AND NUTRITION	11.2
● SUPPLEMENTAL SECURITY	7.3
● RAILROAD RETIREMENT	6.0
● COAL MINER BENEFITS	1.6
● SPECIAL PYMTS, TREASURY	1.2
● WORKMEN'S COMPENSATION	1.0
● OTHER	
● HEALTH (MEDICARE & OTHER)	56.3
● EDUCATION	6.4
● VETERAN'S BENEFITS	16.3
● MILITARY RETIRED PAY	16.0
● ALL OTHER FUNCTIONS	1.0
TOTAL: HUMAN RESOURCES PYMTS:	342.2

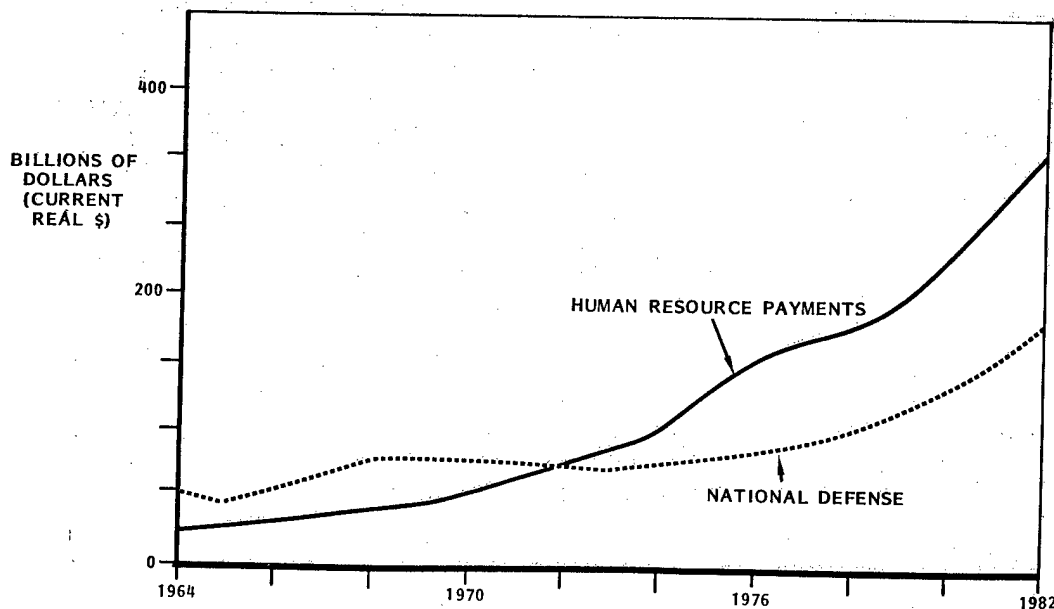
CURRENT DOLLARS



THE CHART ABOVE SHOWS HUMAN RESOURCES PAYMENTS, BASED ON 1983 ESTIMATED EXPENDITURES IN ACTUAL DOLLARS, HAVE INCREASED THIRTEEN FOLD SINCE 1964. EVEN IF ONE LOOKS AT THE COST OF HUMAN RESOURCES IN 1964 IN TERMS OF WHAT IT WOULD COST TODAY, CONSTANT DOLLARS, THE INCREASE FROM 1964 TO 1983 WOULD BE OVER 262 BILLION DOLLARS, WHICH IS RATIO OF OVER 4 TO 1. LET'S EXAMINE THE FACTS.

THE NATIONAL PRIORITY CHANGED FOLLOWING THE VIETNAM ERA. THE CHART BELOW SHOWS THAT DEFENSE SPENDING OVER THE PAST 18 YEARS HAS INCREASED APPROXIMATELY 3 TO 1.

COMPARISON OF HUMAN RESOURCES PAYMENTS AND NATIONAL DEFENSE OUTLAYS

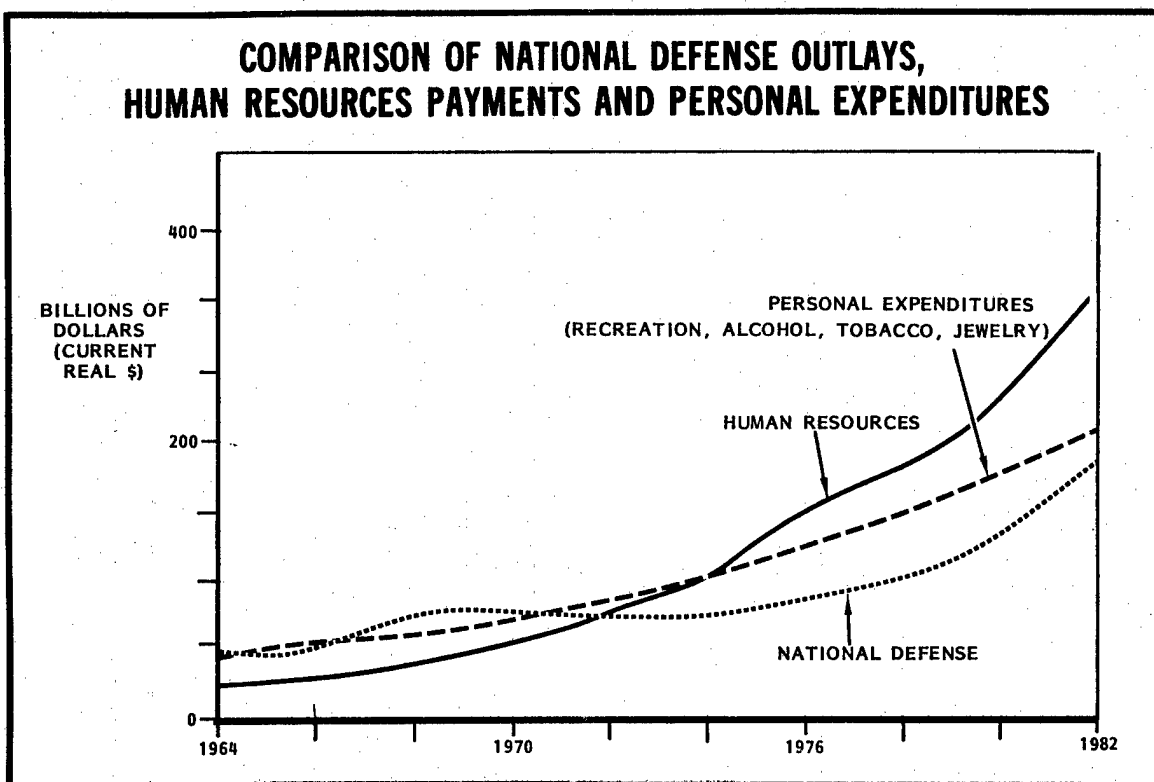


IN CONTRAST, GOVERNMENT PAYMENTS IN THE HUMAN RESOURCES PROGRAMS INCREASED IN A RATIO OF ALMOST 12 TO 1. WE EXPECT THIS RATIO TO INCREASE TO 13 TO 1 THIS YEAR. THIS RAPID EXPANSION IS MAINLY DUE TO INCREASED BENEFITS TO MORE BENEFICIARIES. IT IS A FACT THAT PEOPLE ARE LIVING LONGER AND COLLECTING HIGHER BENEFIT PAYMENTS UNDER SOCIAL SECURITY, AND MEDICARE/MEDICAID. THIS SPENDING IS EXPECTED TO CONTINUE TO RISE IN 1984, LARGELY DUE TO DEMOGRAPHIC AND ECONOMIC CONDITIONS - INCREASING POPULATION AND COST-OF-LIVING ADJUSTMENTS.

NINETEEN YEARS AGO WE SPENT ALMOST TWICE AS MUCH ON DEFENSE AS ON HUMAN RESOURCES PROGRAMS. OVER TIME THE CURVES HAVE CROSSED AND THE SITUATION HAS REVERSED.

THE STANDARD OF LIVING OF AMERICANS HAS ALSO BEEN STEADILY IMPROVING DURING THE LAST 19 YEARS. ONE MEASURE OF THIS LIFESTYLE IMPROVEMENT IS THE AMOUNT SPENT ON PERSONAL EXPENDITURES SUCH AS RECREATION, ALCOHOL, TOBACCO AND JEWELRY.

THE CHART BELOW PRESENTS PERSONAL EXPENDITURES---CONSISTING OF RECREATION, ALCOHOL, TOBACCO AND JEWELRY---AS COMPARED TO DEFENSE AND HUMAN RESOURCES EXPENDITURES. IT SHOULD BE NOTED THAT SINCE 1970, THIS MEASURE OF THE QUALITY OF AMERICAN LIFE HAS INCREASED STEADILY RELATIVE TO THE NATIONAL DEFENSE.

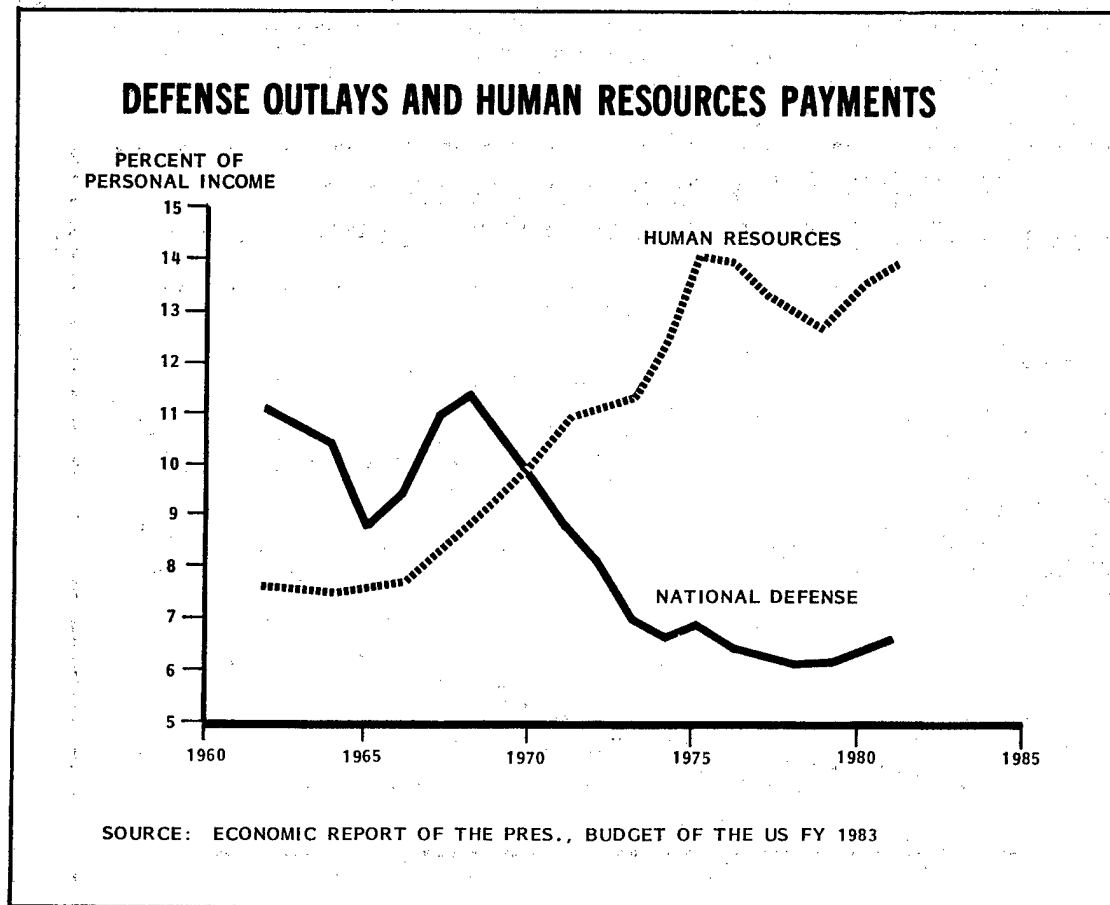


IN REALITY, WE SPEND MORE ON JUST ABOUT EVERY FACET OF DAILY LIVING THAN WE DO ON DEFENSE.

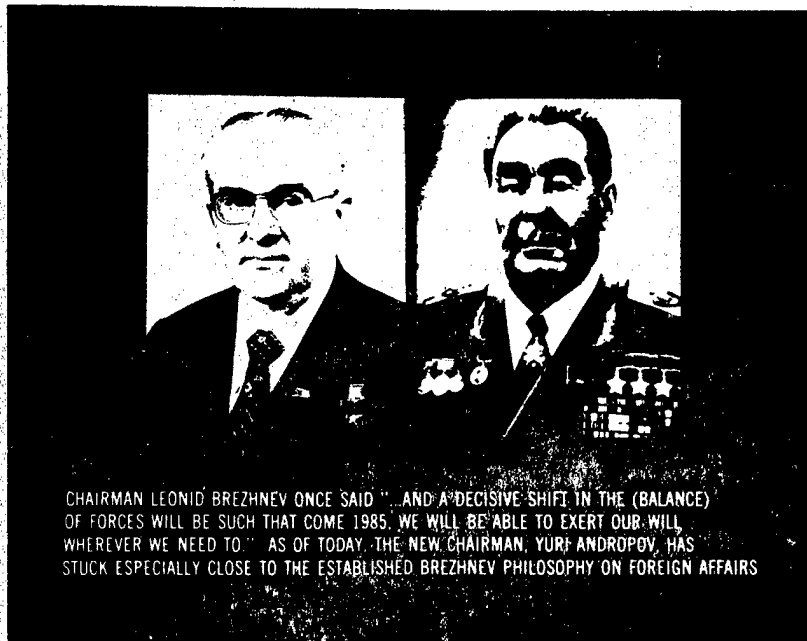
THE LUXURIES OF RECREATION, ALCOHOL, TOBACCO, AND JEWELRY ARE SIGNIFICANT ASPECTS OF AMERICAN SOCIETY, BUT LET'S NOT FORGET THAT OUR COUNTRY MUST PROTECT IT'S FREEDOM, OR OUR LIFESTYLE WON'T CONTINUE AS WE KNOW IT TODAY.

WHAT IS THE BOTTOMLINE MESSAGE TO THE AMERICAN PUBLIC? DESPITE WHAT OTHERS MAY SAY, DEFENSE SPENDING IS NOT DEPRIVING AMERICANS OF THE BASIC NECESSITIES OF LIFE.

THE MESSAGE IS THAT SINCE 1960, RELATIVE TO PERSONAL INCOME, THE INDIVIDUAL CONTRIBUTION TO DEFENSE SPENDING HAS DECREASED WHILE THE CONTRIBUTION TO SOCIAL SECURITY, HEALTH BENEFITS, EDUCATION TRAINING, UNEMPLOYMENT AND SOCIAL SERVICES HAS STEADILY RISEN. THE AMERICAN WORKER NOW IS SPENDING LESS OF HIS TIME (AND INCOME) SUPPORTING THE DEFENSE ESTABLISHMENT THAN ANY TIME IN THE LAST 22 YEARS. THE CHART BELOW SHOWS THAT WAGE EARNERS CONTRIBUTE ABOUT 7% OF EACH DOLLAR TO DEFENSE AND ABOUT 14% OF THAT DOLLAR TO HUMAN RESOURCES. THE REQUESTED INCREASES IN DEFENSE SPENDING WILL START TO REVERSE THIS TREND, BUT NOT SIGNIFICANTLY.



IF WE WANT TO CONTINUE THE AMERICAN WAY OF LIFE AND THE FREEDOMS WE ENJOY, WE MUST HAVE A STRONG DEFENSE. IN PERSPECTIVE, IT IS A RELATIVELY INEXPENSIVE SERVICE, AND ONE THAT IS ESSENTIAL IF WE ARE TO MAINTAIN OUR FREEDOM AND THAT OF THE FREE WORLD.



CHAIRMAN LEONID BREZHNEV ONCE SAID "...AND A DECISIVE SHIFT IN THE (BALANCE) OF FORCES WILL BE SUCH THAT COME 1985, WE WILL BE ABLE TO EXERT OUR WILL WHEREVER WE NEED TO." AS OF TODAY, THE NEW CHAIRMAN, YURI ANDROPOV, HAS STUCK ESPECIALLY CLOSE TO THE ESTABLISHED BREZHNEV PHILOSOPHY ON FOREIGN AFFAIRS.

WE AMERICANS TEND TO FORGET THAT THE MOST IMPORTANT SOCIAL SERVICE A GOVERNMENT CAN DO FOR ITS PEOPLE IS TO KEEP THEM ALIVE AND FREE. DEFENSE SHOULD NOT BE MADE THE SCAPEGOAT FOR THE ILLS OF THE ECONOMY. THE AMERICAN PUBLIC MUST UNDERSTAND THAT THE COST OF REMAINING STRONG IN PEACETIME IS A RELATIVELY SMALL PRICE TO PAY COMPARED TO THE COST OF WAR BROUGHT ON BY WEAKNESS. REMEMBER THE FIRST PART OF THIS PRESENTATION--THE FACTORS WHICH DICTATE MILITARY REQUIREMENTS--THE THREAT AND NATIONAL OBJECTIVES. THE THREAT IS REAL AND OUR NATIONAL OBJECTIVES HAVE SUSTAINED THE TEST OF TIME.

WE NEED GUNS AND BUTTER.