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June 30, 1988

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MEMORANDUM FOR:

THE COMMISSION ON INTEGRATED LONG-TERM STRATEGY

The Working Group on Regional Conflict is pleased to present to the Commission on Integrated Long-Term Strategy our report *Supporting U.S. Strategy for Third World Conflict*.

This report is a product of over one year of research, analysis, and drafting by Working Group members. Our report is consonant with the Commission's report, Discriminate Deterrence, which made substantial use of our preliminary findings and conclusions. Our report provides more comprehensive and detailed information underlying the Commission's report. However, this report is the responsibility of its authors, and the Commission does not necessarily subscribe to all of its details. Our Working Group has also drawn on this report for the paper we have provided to the Commission entitled *Commitment to Freedom: Security Assistance as a U.S. Policy Instrument in the Third World*.

The lead authors for the Working Group's report have been John Keeley and myself. Contributing authors include Paul Mahlstedt and Tom Sullivan. Other members of the Regional Conflict Working Group are listed on the inside back cover.


Paul P. Gorman
Chairman
Regional Conflict Working Group

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SUPPORTING U.S. STRATEGY FOR THIRD WORLD CONFLICT

Report by the Regional Conflict
Working Group submitted to the
Commission on Integrated Long-Term
Strategy

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The Report of the Commission on Integrated Long-Term Strategy, Discriminate Deterrence, was published in January 1988 and is available for sale by the Superintendent of Documents, US Government Printing Office, Washington, DC 20402 for \$6.50.

Working Group reports and other separate papers which were prepared in support of the Commission on Integrated Long-Term Strategy are being printed in limited numbers by the Department of Defense. There are no restrictions on further reproduction of these Working Group reports and other papers.

**SUPPORTING U.S. STRATEGY
FOR
THIRD WORLD CONFLICT**

A Report by the
Regional Conflict Working Group
to the
Commission on Integrated Long-Term Strategy

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MAIN POINTS

Nearly all the armed conflicts of the past 40 years have occurred in what is vaguely referred to as the Third World: the diverse countries of Asia, the Middle East, Africa, Latin America, and the Eastern Caribbean. In the same period, all wars in which the United States was involved--either directly with its combat forces or indirectly with various forms of military assistance--were in the Third World. For Americans, these have been contentious wars: the only U.S. involvement that has not provoked rancorous disagreement among us is support for the Afghan resistance to Soviet aggression.

Integrated long-term strategy requires a much greater consensus, within Congress and among the electorate, on what to do about U.S. interests in Third World conflicts. Without such agreement, we are unlikely to undertake the long-range measures needed to protect our own security interests there, or those of allies and friends. We will postpone the legislative reforms, organizational realignments and resource allocations needed within our own Government, and the diplomatic initiatives required abroad to anticipate contingencies there. In particular, we will not begin the years of development required to exploit U.S. technology for support of national strategy in the same way that we have for the more dire threats of war with the Soviet Union. This report seeks to contribute to such a consensus by examining strategic ends, ways, and means: the national objectives the United States ought to pursue in the Third World, the concepts it should employ in doing so, and the resources it should be prepared to bring to bear.

In keeping with the Commission's focus, the Working Group has dealt more extensively with *ways* and *means* than *ends*. Future Administrations and future Congresses will determine the latter, based on their appraisal of threats to our interests at the time. However, it seems evident that, through the turn of the century and beyond, U.S. national interests in what is now called the Third World will remain and conceivably could grow. U.S. interests will surely include maintaining the security of our nation and our allies from threats arising there; responding to the challenges of the global economy; defending and advancing the cause of democracy, freedom, and human rights; assuring access to allies, strategic regions, and critical raw materials; and building constructive relationships among nations, within which disputes can be settled peacefully. But

challenges to achieving such goals in the Third World are likely to be formidable. Profound change will occur over the next two decades, and some Third World nations will emerge as powerful politico-military actors. More political violence is portended, for it is likely not only that underlying tensions will remain unresolved, but also that available weapons will be more numerous and more destructive.

However the United States tries, escaping that future violence is improbable. Neither passivity nor indifference will shield us, or serve well other purposes of national strategy. Almost all Americans are now conscious that the United States is embattled with Third World terrorists and drug smugglers. We have all experienced in our own communities the impact of large-scale migrations into our country by fugitives from conflicts in Asia and the Caribbean Basin. And, recent peril for fragile democracies in Central America and attacks in the Persian Gulf on the economic lifeline of our allies in Europe and Northeast Asia serve to remind us that nations are increasingly dependent on each other, the United States no less than others. Our country, because of its wealth and power, will be no more able to avoid Third World conflicts in the future than it has over the past 40 years.

The Working Group advocates a strategy of selective involvement. When key national interests are engaged in the Third World, the United States should pursue these *ends*:

- Act to strengthen allies and friends against internal and external threats, and thus help to defend governments undertaking political, economic, or social reforms that ameliorate basic vulnerabilities
- Support resistance movements that oppose regimes hostile to U.S. interests, provided our aid can favorably affect the outcome
- Aid governments that suppress international traffickers in illegal drugs
- Deter, preempt when we can, and react decisively to terrorism.

Concerning *ways*(strategic doctrines or concepts), the Working Group understands that U.S. policy in the Third World must rely principally on political and economic instruments and that national security interests can only be protected within such a broader framework. But security concepts of the past will serve us poorly amid the dangers of the future. The Working Group has therefore essayed a prescription for strategic options

broader than have been available to national leaders to date. The Working Group commends the following guidelines to Government planners:

- Prepare for low intensity conflict
- Seek to confine Third World use of U.S. forces to indirect roles
- Reform U.S. security assistance
- Provide more and better cooperation to help friends help themselves
- Develop alternatives to U.S. Third World bases
- Improve equipment and management to aid freedom fighters
- Provide means to collect and disseminate tactical intelligence
- Build new defenses against terrorism
- Suppress illegal drug trafficking at its sources.

As to *means*, these concepts entail drawing in full measure upon the potential of American technology. They will also need unprecedented coordination among those who plan and carry out U.S. policy and major new forms of cooperation from friends and allies abroad. However, pursuit of these proposals will not require Congress to appropriate large new resources--the strategy described here could be underwritten by \$12 billion per year. Some of this amount could be provided by reallocations and adjustments within and among affected departments and agencies, and some by other than Federal funds, so that only a portion of the recommended initiatives would require new appropriations. The Working Group is convinced that such resources are essential for an integrated, long-term strategy.

I. TOWARDS A STRATEGY FOR THE THIRD WORLD

A. RETROSPECT

In 1945 World War II ended, the United Nations came into being, and most of mankind looked forward to an era of peace. Peace did come, by and large, for the peoples of the industrialized nations of the Northern Hemisphere. But to their south, in the developing nations or Third World, 1945 was the beginning of a period of profound change often marred by political violence.

Most Americans tend to think about U.S. national security in terms of an attack on the United States--especially a nuclear attack. But not enough of us appreciate that recent wars have become more deadly than those in earlier eras, and that, overwhelmingly, this destructiveness of human lives and property is a function of the steadily increasing lethality of conventional weapons. Over the years since World War II, over 30 conventional wars and approximately twice as many guerrilla wars have killed more than 16 million people. An uncounted toll has been taken by terrorism and other forms of political violence. Ours has been a violent half century.

What is striking is that, except for the guerrilla war in Greece in the late 1940s, the Soviet use of force to stifle self-determination in Eastern Europe in the 1950s and 1960s, and the violence in Ireland, wars since World War II have taken place in the Third World--in East Asia, in the countries formerly part of European colonial empires, and in Latin America. These regional conflicts stemmed from struggles to win independence from colonial domination; to adjust borders, influence, and power among newly independent nations; and to realign the internal political and social structure or governmental form within a nation. With few exceptions, the colonial wars were over by 1958. Regional boundary wars continue to this day, and have almost always involved clashes of conventionally organized military forces. The internal wars, by far more numerous, also continue. These latter conflicts have usually involved challenges to a government and its conventional forces from irregular forces--guerrillas, insurgents, or armed subversives--though in many cases these groups received significant aid from outside the country.

These wars have taken American lives and destroyed American property, and gravely impacted American strategy. No President of the United States since Franklin Roosevelt has been able to avoid serious domestic political problems arising from the Third

World. Presidents Truman, Eisenhower, Kennedy, Johnson, Nixon, Ford, Carter, and Reagan each encountered severely disrupting difficulties engendered by radical nationalism in Asia. These same presidents had to deal with similar issues from the Caribbean Basin. And while explanations of these conflicts to the American people would be easier were it possible to attribute such difficulties exclusively to our strongest adversary, the Soviet Union, the fact is that these were challenges that, however aided and abetted by the U.S.S.R., had origins in, and derived from, indigenous political or social tensions.

There has been a great deal more continuity in American strategy for avoiding or coping with such problems than most Americans suppose. Since World War II, all Administrations, Republican or Democrat, have pursued in the Third World, as a contribution to U.S. security, programs of foreign aid combining economic and military assistance. The Kennedy Administration's seeming shift in strategy in 1961--the Alliance for Progress, the Peace Corps, increased involvement in Southeast Asia--was quite consistent with recommendations advanced toward the end of the Eisenhower Administration by bipartisan commissions, committees, and study groups seeking an integrated, long-term strategy. These strategists anticipated in 1958--correctly as events have shown--both that the United States faced decades of competition with the U.S.S.R., and that U.S. strategy for dealing with the Third World required adjustment.

Consider for a moment the strategic position of the United States 30 years ago: A two-term, Republican President was about to leave office, his Vice President heir-apparent to his tussles with Congress. A profound change in U.S.-Soviet relations was portended. Many Americans feared that in fact the U.S.S.R. possessed, in their evident mastery over nuclear and space technologies and in their purposeful statism, means for surpassing the United States. There was a sea-change underway in U.S. strategy: 1958 was the year in which the United States Navy mothballed the last of its battleships and sailed a nuclear submarine under the polar ice cap for the first time; the Air Force laid up the B-36, the last of its propeller-driven strategic bombers, and started development of its second-generation ICBM; and the Army retired its high-altitude air defense guns and launched a satellite into space. It was the year in which the Joint Staff came into being, and the Strategic Army Command was formed, in line with the recommendations of the Gaither Committee in 1957 that the nation ought to improve its preparedness for future "local wars", perceived to be probable in the Middle East and Asia.

1958 was the year in which President Eisenhower sent U.S. military forces into Lebanon to forestall its loss of independence through indirect aggression--calculated

overthrow of its democracy through propaganda, terror, and arms and funds for dissident minorities. As Secretary of State Dulles expressed it, such indirect aggression was inimical to U.S. security, for if it were tolerated "as a legitimate means of promoting international policy, small nations would be doomed, and the world would become one of constant chaos, if not war." That year, the Rockefeller Report on U.S. defense policy identified these "concealed wars" as one of the most serious strategic challenges facing the nation:

These conflicts raise issues with which in terms of our preconceptions and the structure of our forces we are least prepared to deal. The gradual subversion of a government by concealed foreign penetration is difficult to deal with from the outside, even though the fate of millions may depend upon it.... Our security and that of the rest of the non-Communist world will hinge importantly on our willingness to support friendly governments in situations which fit neither the soldier's classic concept of war nor the diplomat's traditional concept of aggression.

In 1958 and 1959, a Presidential Committee under William H. Draper reevaluated U.S. foreign policy and foreign aid and recommended increased assistance for the internal defense of Third World nations, with broadened use of local military resources beyond security, to include education, minor engineering, and other community services. In 1960, Senator Fulbright sponsored Congressional publication of a study that strongly endorsed those recommendations of the Draper Committee. In 1961, President Kennedy directed formation of the U.S. Strike Command (USSTRICOM) to prepare land and air forces for rapid deployment overseas to deal with "brushfire" local wars. In 1963, the President directed reorganization of the Caribbean Command into the U.S. Southern Command (USSOUTHCOM), with higher rank and broader regional responsibilities for its commander, and assigned to the Commander-in-Chief, USSTRICOM, regional responsibilities for U.S. military undertakings in the Middle East, Africa, and South Asia.

If the strategic analyses and structural responses of 30 years ago had a flaw, it lay in understating the implications for this nation of violence in the Third World. To be sure, in the 1960s, the United States responded maladroitly to the crises in Southeast Asia, overestimating its own capabilities and underestimating those of its enemies. We misapplied our military power, acting indecisively in North Vietnam, and imprudently in South Vietnam. We underestimated North Vietnamese resolve and overestimated South Vietnamese political cohesion, and our own. Retrenchment was a sensible course. President Nixon's Guam Doctrine, which held that the United States would help other

nations help themselves, returned to the previous emphasis on economic and security assistance as the mainstays of U.S. strategy among the less-developed nations.

The United States, however, overreacted in the 1970s: we not only eliminated the military commands deployed to prosecute the war in Southeast Asia, but also slashed economic and security aid funds for Asia, Latin America, and Africa; curtailed the number of U.S. personnel deployed in those countries; cut back on numbers of foreign military leaders trained in the United States; abolished USSTRICOM; and severely curbed USSOUTHCOM. We should not have misread the operational lessons of the 1960s as requiring abandonment of U.S. interests, friends, and allies in the Third World.

The United States did not really have the option of strategic withdrawal from the Third World. Much of what we imported lay out there--agricultural commodities, fossil fuels, metal ores, and rare earth minerals--and its nations and peoples were important consumers of American goods and services. Our allies in Europe and the Northwest Pacific depended upon the United States to maintain the freedom of the seas and to support international stability in a world as yet unaccommodated to the demise of the colonial empires. And our principal strategic competitors, the Soviets, seemed bent on a new colonialism: the U.S.S.R. pressed in wherever it perceived strategic opportunity in the Third World. Yet, however exploited by the Soviets and their East European and Cuban surrogates, most threats to U.S. interests were indigenous: voracious forces of societal change tearing at the fabric of developing societies: destabilizing overpopulation and overurbanization, coupled with underproductivity; new social, economic, and political ideas contesting with centuries old rigidities; radical nationalism and militant sectarianism; clashes of ethnic and religious prejudices; and stress on educational systems wholly inadequate for dealing with the foregoing or with the onrush of new technologies compressing travel time and opening media vistas of distant lands of unimaginable wealth.

Even as the United States executed its post-Vietnam strategic withdrawals, its Third World interests thrust upon it new responsibilities. The Yom Kippur War of 1973 resulted in Camp David and virtually continuous deployment of U.S. land forces in the Sinai. The fall of the Shah in Iran, the Soviet invasion of Afghanistan, the militarization of Nicaragua--each event elicited a response from the President at the time that revalidated the strategy of remaining involved and of seeking to influence events to our advantage however we could, including through the use of our military strength. The formation of the Rapid Deployment Joint Task Force by President Carter in 1979, and his stationing of carrier battle groups off the Arabian Peninsula were conceptually consistent with the strategic proposals of 1958.

President Reagan acted similarly in bolstering the U.S. Southern Command, and in forming the U.S. Central Command, the U.S. Special Operations Command, and the U.S. Transportation Command.

Though U.S. strategic premises changed but little, the bipartisan consensus enjoyed by Presidents Eisenhower and Kennedy has dissipated. Recent presidents have had to act from a narrowing base of public understanding and support. Over the past 20 years, the common elements in American political discussions over U.S. involvement in the Third World have been acrimony and divisiveness. Some have held that the United States has no right or obligation to influence events in the Third World with any military means and no capacity to change the course of history in any event; these would have the United States eschew all Third World conflict, and point out--somewhat unfairly, given the record of the 1970s--that neo-isolationism is a policy with which the United States has never experimented. Others have seen the Third World as a new arena for East-West strength-testing and have sought to extend the concept of containment, perceived as successful in Europe and South Korea, and to contest with all means at our disposal all Soviet Third World undertakings. Fortunately, most Americans have supported neither extreme view. Most have manifested an uneasy agnosticism: whatever the Third World issue, place names are unfamiliar, history and geography uncertain, and U.S. interests unclear. Among the majority, the burden of opinion has vacillated from support for use of U.S. military instruments to reliance on international negotiations. Future Presidents are unlikely to be able to protect U.S. national security interests in the Third World without a better consensus.

Third World conflict has complex origins. The American public seems to find it easier to understand in terms of portrayals of the U.S.-U.S.S.R. competition in the Third World--although that competition is only one challenge for U.S. strategy there. It is true that rising Soviet influence in the Third World has led to the displacement of weak, post-colonial governments and oppressive oligarchies with a rash of Marxist-Leninist garrison states. Some strategists have seen the Soviet's thrust into the Third World during the 1970s and 1980s as a measure of U.S. and allied success in deterring a test of arms with them for control of free nations in the Northern Hemisphere. According to this view, strong defenses against conventional or nuclear attack channeled Soviet aggressiveness into the Southern Hemisphere and compelled not only Moscow and its surrogates, but also other antagonists of the United States--for instance, the Syrians and the Iranians--to resort to forms of violence that entail lower risk and cost. Whatever the reason, threats to U.S.

security interests in the Third World from sabotage, terrorism, and insurgency have mounted as the influence of the Soviet Union and its fraternal socialist nations has increased.

Some indices of the Soviet challenge in the Third World follow:

- As the United States withdrew its personnel, the numbers of the Soviets and their surrogates increased dramatically in all categories. The U.S.S.R. now has 30 times more military advisors* in the Third World than the United States.
- Over the last two decades, the United States has cut back its training programs here for Third World military personnel by two-thirds. In the same period, the Soviets trebled theirs; and each year they now train in the U.S.S.R. twice as many Third World military as does the United States in CONUS.
- Soviet aid has increased as dramatically as U.S. aid has decreased. In dollar terms, Soviet military aid for Third World countries is now 3 times greater than that of the United States.

Numbers of Third World military personnel trained in the "socialist homeland" apparently reflect strong Soviet determination to gain and maintain influence with prospective Third World military leaders. Whatever the rhetoric of their leaders, the U.S.S.R. and its client states have behaved as though they are deeply committed to exploiting future political violence and are determinedly preparing to foment, to augment, to support, or to capitalize upon it. The Soviet Union and Cuba, in particular, have trained, year by year, thousands of young men and women from Third World nations for terrorism, insurgency, and subversion.

These data suggest that sometime in the 1970s, Soviet strategists, seeing the United States in the after-shock of Vietnam and Watergate, and perhaps encouraged by the War Powers Resolution and the Clark Amendment to believe that the United States did not intend to contest a more aggressive policy in the Third World, launched a vigorous effort to suborn developing countries in Asia, Africa, and Latin America. Like their war materiel, their undertakings were initially clumsy and trouble-prone, but in time--retrofitted in service--their overseas operations became quite serviceable. The Soviet emphasis over the past several decades upon training annually thousands of Third World nationals in the

* These numbers include neither Cuban troops in Africa, Soviet troops in Afghanistan, nor U.S. troops at U.S. bases in the Third World.

attitudes and the techniques of political violence in itself assures them broader influence in the future. Because of this training, all free nations will have to contend with many more opponents schooled in armed subversion.

In some respects, the Soviets have managed their Third World undertakings somewhat better than has the United States. They have often opted for maritime basing, using barges and portable piers instead of building elaborate fixed facilities ashore. Inside a developing country, they have adopted a low profile, cloistering their personnel. They often exert a strong hand in local politics, but usually at the very top, discretely hidden behind diplomatic formality. They have been particularly adroit at installing their own or proxy systems for governmental command, communications, and intelligence. Their more public presence is often disguised as humanitarian aid--for example, in Nicaragua, the principal Soviet undertaking, involving more than half their personnel, has been a military field hospital. They have pursued an effective coalition strategy; their use of fraternal nations has been masterful. While Soviet political and economic doctrines are patently vapid, and while association with the U.S.S.R. seems to offer to any Third World country only subjugation to a new, more oppressive form of imperialism, the Soviets, no doubt, consider the growth in the number of Marxist-Leninist states in the Third World strategically significant.

Whatever their political estimates, Soviet strategists can now plan in the knowledge that, since the 1960s, the U.S.S.R. has transformed itself militarily from an essentially land-locked, continental power to a nation with a demonstrated capability for intervention worldwide. The acquisition by the Soviet Union of overseas bases on every continent save Australia--a global network from Cam Ranh Bay in Southeast Asia, to Dahlak above the Horn of Africa, to Cuba in the Caribbean--and its growing capabilities for projecting military force by air or sea, have occurred with little public notice and concern in the Free World. The Soviets clearly view themselves as a power with a global reach. We and our allies and friends would be foolish to ignore that perception in our own strategic estimates, for to date the Soviets have manifested no change in their strategic objectives.

B. FUTURE THREATS

Mikhail Gorbachev's policies of *perestroika* and *glasnost*, coupled with the withdrawal of Soviet armed forces from Afghanistan, have led some Sovietologists to conclude that Soviet strategy in the Third World may be undergoing significant change. Some estimators believe that investments in amphibious ships and other materiel for long-

range maritime force projection have leveled off, but it is not clear whether this slow-down reflects a different strategy, or a developmental phase before a new thrust of advanced technology toward a much modernized force. Moscow's rhetoric has shifted emphasis from "supporting wars of liberation" to "exploiting intercapitalist contradictions", which apparently means cultivating newly industrialized states of the Third World, such as India, Brazil, Mexico, and Argentina in the expectation that these will find common cause with the U.S.S.R. against the capitalist allies of the Northern Hemisphere. Soviet admission of casualties and policy failures in Afghanistan can be interpreted to mean that the Soviets, like the United States, may have matured enough to accept withdrawal without military victory. But few experts see any sign that Gorbachev intends to abandon commitments to communist regimes in Cuba, Nicaragua, Angola, or Vietnam. Hence, what appears to be in store for the United States in the future is a more flexible, more subtle Soviet foreign policy aimed at creating divisions among us, our traditional allies, and the principal Third World nations.

Future security threats to United States interests in the Third World, however, should not be estimated only, or even primarily, in East-West terms. As there have been in the past, and are today, there will be in the future local causes for enmity toward the United States and powerful arms in the hands of prospective Third World foes. As recent events in the Persian Gulf illustrate, the weapons turned against us might come from neither the United States nor the U.S.S.R.

Each year, the mechanisms of war are becoming more destructive, more accurate, more numerous, more transportable, and more available. Differences between the military capabilities of the Northern and Southern Hemispheres are steadily diminishing. Modern military technology is spreading throughout the globe, and high-technology weapons are available for saboteurs, terrorists, and guerrillas of any country. Saboteurs were responsible for the terror-mining of the Red Sea approaches to the Suez Canal in 1984, using late-model, multifuzed, Soviet-manufactured bottom mines. Naval mines, guerrilla launches, and antiship guided missiles have threatened oil tankers plying the Persian Gulf. Terrorists drove an extraordinarily powerful and compact fuel-air explosive device against the building housing hundreds of U.S. Marines in Beirut. Guerrillas in Afghanistan and Nicaragua have employed heat-seeking surface-to-air missiles effectively, and subversives in El Salvador have used computer-generated encryption systems. Some radical governments have been willing to employ the most advanced and lethal weapons available to them without hesitation, even poison gas, as in the Iraq-Iran war.

In a development of particular significance for the United States, some Third World perpetrators of political violence have found common cause with the international criminal cartels that smuggle drugs worldwide, so that American citizens who illegally purchase controlled substances, especially cocaine, heroin, and cannabis, now unwittingly fund what has been referred to as paramilitary criminality--vast, continent-spanning, rich, piratical organizations that cooperate in certain Third world countries with guerrillas, arms-smugglers, terrorists, or other subversives. Among countries so afflicted have been Guatemala, El Salvador, Costa Rica, Colombia, Peru, Bolivia, Lebanon, Iran, Afghanistan, India, Burma, Sri Lanka, and the Philippine Republic. In Nicaragua, Cuba, and even Panama, government officials, at the highest level, have cooperated with the traffickers.

The Defense Intelligence Agency (DIA) points out that the U.S. intelligence community has been hesitant to characterize these linkages as a worldwide, narco-terrorist conspiracy or a distinct form of political violence, seeing them mainly as money-making operations. DIA informed this Working Group that:

Involvement in the drug trade is similar to other revenue generating criminal activities. Bank robberies, extortion, kidnapping for ransom, and murder for hire are equally common financial enterprises conducted by terrorist groups. Illegal drug trafficking, because of the revenue it generates, has a secondary effect of facilitating instability in the world. Terrorism, on the other hand, seeks as a primary effect to create political change, influence behavior, or cause anarchy. We believe illegal drug trafficking exists primarily because it is profitable. The two threats are manifestations of different problems.

Nonetheless, because the drug traffickers have created an intercontinental network that lends itself to the purposes of subversives, because drugs cost Americans so much in Government expenditures, health problems, crime, and lost productivity, and because terrorists target Americans to influence this nation's security policies, both threats affect U.S. national security.

By the first decade of the next century, we must anticipate a world in which groups hostile to the United States--governments and non-governmental political or criminal organizations--will have access to both weapons of devastating power and reliable means to deliver them. The United States and its traditional allies of the Northern Hemisphere could possibly be attacked, and must certainly expect to be threatened, by diverse nations and groups who, compared with the current set of such foes, will be both more numerous and

more dangerous. For example, it is possible that nuclear weapons could be in the hands of nations that recently have been characterized by instability and international ruthlessness--such as Libya, Iran, and Iraq--increasing their ability to intimidate neighbors and introducing grave new dangers into regional conflict.

As nuclear technology proliferates, so also does the technology that will permit the construction of ballistic missiles and other systems for the delivery of nuclear and conventional warheads over long distances. A Congressional report* in 1986 documented active missile development programs in Brazil, Argentina, Israel, India, Taiwan, Korea, and Pakistan. As these systems become more common, there is a distinct possibility that they will come into the hands of radical elements intent on causing harm to the United States, its citizens, or its friends and allies. The implications of such speculations are not pleasant: a world in which trained terrorists and subversives abound, some operating in league with drug cartels, and irresponsible governments and radical political groups possess devastating weaponry.

These trends in the Third World portend for future presidents of the United States problems of national security strategy more diverse, urgent, and potentially destructive than those faced by their predecessors. There will be an increasing propensity for this nation and its citizens to become involved in quarrels for which our history and mores have poorly prepared us. Moreover, presidents in the first decade of the next century may have to deal with these involvements without many of the military bases overseas that have underwritten the strategy of the United States in the Third World for most of the 20th century.

Strategic challenges to the United States in the developing nations are unlikely to subside. The Commission on Integrated Long-Term Strategy has pointed out that, in the first decade of the next century, the world will likely be quite different, and probably more dangerous. Rates of change in coming decades will be startling. China and Japan together will grow economically to command wealth about equal to that of the United States, and 2 to 3 times that of Western Europe or of the U.S.S.R. Either or both Asian countries could also wield significant power in a politico-military sense in the Third World. China, India, Brazil, and conceivably other newly industrialized nations will have the capacity to produce and support substantial arsenals of modern weapons, so that no longer will the United States and the Soviet Union be able surely to influence the resolution of regional wars through the control of armaments. In almost all developing nations, the average age will

* Congressional Research Service, Report No. 86-29 SPR, April, 1986.

decline, while in the developed nations it will increase. In 20 years, the peoples of the northern, developed nations will be preponderantly middle-aged "haves", while those of the Southern Hemisphere will include large cohorts of unemployed, juvenile "have-nots" with dim prospects for earning a living. In Latin America today, 38 percent of the population is under age 15. Unemployment there is already at 40 percent and rising. Urbanization is approaching 50 percent and is expected to reach 75 percent by 2010. Mexico is particularly vulnerable to imbalanced growth. The prospect is for slum-shackled cities swarming with millions of poverty-stricken, idle, disease-vulnerable teenagers, traps from which many could seek to escape by illegal emigration, or by turning to crime, or to political radicalism.

There are seven related trends among the developing nations likely to affect U.S. security interests in the next two decades:

- **Diffusion of advanced military technology.** As mentioned above, many politico-military actors in the Third World could possess advanced weapons, and all forms of conflict within Third World regions, or likely to arise from there--such as terrorism--will be of greater potential danger to any U.S. strategic interests upon which that conflict may impinge.
- **Continued interdependence.** The raw materials and agricultural produce of the developing world--especially petroleum and other minerals--will remain strategically important to the United States and its northern hemisphere allies for the foreseeable future. North-South trade and investments will remain a mainstay of Third World economies. There is no technology in sight that will alter fundamentally those patterns. Maintaining access to strategic materials and assisting nations close to us politically, economically, and socially will persist as a strategic goal and require adroit U.S. use of economic, security, and other assistance.
- **U.S. friends and allies are becoming more influential.** The U.S. strategy of helping others help themselves has been significantly aided in recent years by cooperation from other nations--e.g., cooperation of the United Kingdom in the Caribbean Basin and Kenya, Italy's aid for Somalia, France's cooperation in Chad and Djibouti, Germany's aid for Turkey, Pakistan's role with the Afghan resistance, Saudi aid for Yemen, and European contributions to freedom of navigation in the Persian Gulf. U.S. leadership should elicit such assistance from our friends and allies for beleaguered, strategically important third parties. In addition, for some Third World friends in need of military assistance, it may be possible to encourage other regional nations, or even more distant allies, to contribute advisors, logistical support, or even--if necessary--combat forces. The Commission has referred to such assistance as cooperative forces. But U.S. leadership toward cooperative forces will require our playing some role in whatever combined programs may be decided upon, and almost certainly we will find essential more flexible security assistance.

- **Rising U.S. consumption of illegal drugs** from Latin America and Southwest Asia. Drug abuse has exacted high human and economic costs in the United States. Trafficking imperils the very survival of democracy in friendly nations, such as Colombia and Panama, heavily involved in production and smuggling of illegal drugs or in the related movements of money. The United States must reduce domestic consumption of illegal drugs, but at the same time, it faces strategic urgency in helping other nations seeking to eliminate illegal drug trafficking at its source.
- **Immigration.** Over the past decade, the United States experienced the greatest wave of immigration in the memory of living Americans. Each year from 1977 to 1986, legally and illegally, about 1 million people entered the United States to stay, 3 times the annual intake from 1925 to 1965. Most recent immigrants were Asian and Central American refugees from conflict within their homeland. Political violence in the Third World spills over, in this sense, into the United States, and thus, it is in our interest to aid in eliminating its causes.
- **Disease.** Haiti is one close neighbor of the United States already widely infected (10-45% of the population) with the human immunodeficiency virus (HIV) and the related disease AIDS. HIV in some African countries threatens to be as severe a scourge as famine. Under such calamitous circumstances, U.S. public health services could provide important assistance. In past crises in developing nations, often only the military establishment has had the cohesion and resilience to maintain civil law and order and to administer re-building; hence, some U.S. aid might take the form of help from U.S. military medical services.
- **Debt repayment.** The United States is now the world's largest debtor. One implication is that the United States must increase its exports of goods and services, making markets in the Third World important. But markets require economic vitality and growth in the Third World, and these in turn, in country after country, rest on security--further imperatives for integrated U.S. aid programs to promote both.

The foregoing trends portend the dedication by the United States of more attention and more resources to the developing world, especially to Latin America, than has been its wont. An integrated, long-term strategy requires a concerted new effort to develop broader agreement among Americans upon our national purposes in the Third World, and how we shall go about achieving them.

II. STRATEGIC ENDS

A. FORMULATING A STRATEGY

The previous section described future threats to national security in the Third World. The strategy for meeting these threats must be, first and foremost, aimed at what is feasible and what is supportable politically, economically, and technologically. Americans are easily stirred by lofty goals, such as President Kennedy's pledge to "support any friend, oppose any foe, in order to assure the survival and success of liberty." Yet, ultimately, the boldest of presidential visions must run the gauntlets of Congress and meet the test of experience with distant places and peoples.

"National" is a big word, conveying undertakings of daunting scope and complexity and years of effort. The time dimensions of strategy argue for a long-range view, for it takes a long time to change patterns of thought, especially when these are embedded in culture--as is the case, for example, within the U.S. armed services. And it is a long time from ideas, once accepted, to reality. For example, a usual DoD procurement requires 12 years from inception to operating capability--50 percent longer than a two-term Presidency.

The Working Group has sought to sketch a national strategy--an ordering of means to achieve given ends--by reasoning deductively from long-range goals to the resources required to attain them. Although there are genuine limitations on American power in the Third World, often new possibilities were perceived, particularly in the promise of American technology. More than once, an earlier stated strategic concept for attaining our objectives was revised in the light of what seemed possible.

Mainly, the Working Group has followed the construct of Commissioner Goodpaster, who pointed out that devising national strategy turns on answering three fundamental questions:

- What are our objectives?
- What concepts should guide us in pursuing these?
- What means shall we employ?

The answers devised by the Working Group follow.

B. NATIONAL OBJECTIVES

Most Americans would agree that the United States wants and needs peace, security, and freedom. These goals might be further elaborated without much dissent in a formulation such as the following:

- The survival of the United States as a free and independent nation, with its fundamental values intact and its institutions and people secure
- A healthy and growing U.S. economy to provide opportunity for individual prosperity and a resource base for our national endeavors
- A stable and secure world, free of major threats to U.S. interests
- The growth of human freedom, democratic institutions, and free market economies throughout the world, linked by a fair and open international trading system
- Healthy and vigorous alliance relationships.

Concerning the Third World in particular, there is general agreement that the United States ought to encourage and support aid, trade, and investment programs that support economic development and growth of free and humane social and political orders. Moreover, there is general agreement that U.S. policy should be rooted in the peaceful settlement of disputes. But such aspirations are difficult to translate into action, especially in the realm of national security policy and programs. Moreover, there is not general agreement on security issues relating to the Third World: whether or how to address the basic causes of regional instability, to neutralize the influence of the Soviet Union or its proxies, or to aid in combatting threats to the stability of friendly governments and institutions from insurgencies, subversion, state-sponsored terrorism, and international trafficking in illegal drugs.

Some of this latter lack of consensus stems from the absence of a perceived threat to U.S. interests. The studies for the Commission depicting the potentially perilous future will help Americans understand how the Third World could influence the lives of their children.

Some of the lack of consensus proceeds from understandable doubt that the United States could or should intervene in Third World conflicts in any useful fashion--doubts about political, economic, and moral costs; doubts about the efficiency of our governmental mechanisms; and doubts about American wisdom or perseverance.

Some stems from conviction that violence is the only path to reform in much of the Third World, and that U.S. efforts to quell it only defer the inevitable.

This report has pointed out that isolationism is not a feasible future strategy, for we can not avoid conflicts of the Third World impinging upon our national objectives. The problem remains: what to do? It is important that the American people be helped to understand that in many respects, strategic opportunity beckons. Limits on Soviet power in the Third World are evident. Within the past decade, the Soviets have found themselves on the defensive, supporting expensive and drawn-out struggles to maintain in power repressive governments they erected or suborned in Afghanistan, Angola, Ethiopia, Cambodia, Mozambique, South Yemen, and Nicaragua. All told, nearly 500,000 men and women have taken up arms against these governments and the 400,000 Soviet, Vietnamese, and Cuban troops deployed in support of them. The Soviet Union and its allies remain the principal states sponsoring terrorism, subversion, and paramilitary criminality worldwide. As a deterrent to such behavior, U.S. presidents should have at their disposal ways of foiling Soviet expansionist plans and of increasing the costs of their actions in the Third World, including better means of helping those who are threatened or attacked and of detecting, exposing, and interdicting the movements of subversives and the arms and funds central to their plots.

Finally, the United States can plan for the future with a confidence born of its past successes in succoring democracies in the aftermath of World War II, in helping decolonize Asia and Africa, in assisting in the internal defense of nascent democracies in recent years, and in providing a role-model for political freedom and economic growth that has captured the imagination of peoples worldwide. There is today more participation in democratic government by more people than at any time in history. Certainly, Latin Americans behave as though democracy, not Marxist-Leninism, is the wave of the future. Even in Asia and Africa, open societies and the rule of law have gained new adherents. The U.S. record of support for these trends is imperfect, marred with failures of omission and commission, but no other nation in history has affected more people, in so many different climes, through policies of generosity with treasure and blood. One concomitant of that success is that future presidents can expect increasing requests from democracies abroad for U.S. assistance to meet economic duress and security threats. Our strategy must provide for effective responses to these requests.

That the United States will continue to be a force for world peace is as indisputable as the precariousness of peace itself. Our behavior over the next 8 years will underwrite

our international relationships in the Third World during the first decade of the 21st century. If, in the years ahead, we earn a reputation among friends as stalwart and resourceful, if we are then perceived by foes as resolute and resourceful, our presidents are more likely to be able to foster cooperation among friendly nations, to build international institutions more efficacious in promoting world peace and prosperity, and even to make friends among those who now oppose us.

The Working Group's conclusion is that the United States can be much better prepared for achieving U.S. objectives in the Third World than it has been to date. Accordingly, a strategy of selective involvement is proposed. The United States should be prepared, when its own key national interests are engaged:

- To strengthen allies and friends against internal and external threats, and thus helping to defend governments undertaking political, economic, or social reforms that ameliorate basic vulnerabilities
- To support resistance movements that oppose regimes hostile to U.S. interests, provided our aid can favorably affect the outcome, so that friends and foes alike know that our strategic options are not limited to defense or retreat
- To aid governments that suppress international traffickers in illegal drugs
- To deter, preempt when we can, and react decisively to terrorism.

III. STRATEGIC WAYS

Future Administrations and Congresses, like those of the past, will seek national security policies that exploit the innate advantages of the United States: the initiative and independence of its citizens, their technological prowess, and the international respect this nation has earned over the years. As have their predecessors, they will want to deter war through in-being military strength, constructive arms control, capable reserve forces, and effective space and intelligence programs. However, to instruct Government officials how to go about fashioning the military force structure, stationing U.S. forces, setting up governmental organizations, and preparing budgets, future Administrations and Congresses must go beyond articulating a broad objective like "prevent the domination of the Eurasian landmass by the Soviet Union, or any other hostile power or coalition of powers", to specific concepts like "maintain forward deployed forces", "provide for credible nuclear and conventional deterrence", or "modernize NATO's weapons and NATO's industrial base".

What are analogous, practicable ideas for pursuing U.S. national security interests in the Third World? We have selected 10 guidelines, embodying concepts which, if acted upon, would more surely enable the United States to pursue a strategy of selective involvement.

A. PREPARE FOR LOW INTENSITY CONFLICT

The 99th Congress, in the Goldwater-Nichols Defense Reorganization Act (as amended in the Fiscal Year 1987 Department of Defense Authorization), expressed the sense of both bodies that the President should establish within the National Security Council both policy authority and staff to deal strategically with low intensity conflicts, meaning politico-military confrontations below the level of conventional war. The term includes terrorism and political sabotage, subversion, insurgency, and paramilitary criminality. Low intensity conflicts are mainly Third World phenomena but can have both regional and global implications for our national security interests. While high intensity conflict has been successfully deterred in most regions of primary strategic interest to the United States, low intensity conflicts continue to pose a variety of threats to the achievement of important U.S. objectives.

I. Imperatives

For several years, the Army-Air Force Center for Low Intensity Conflict at Langley Air Force Base, Virginia, has been considering relevant concepts. The Center has usefully highlighted five principles, or imperatives, for success in responding to low intensity conflict (the acronymic term-of-art in Washington, these days, is "LIC", pronounced "lick").

- **The primacy of politics.** The violence that manifests itself will always do so in a political context regardless of whether the root causes are social, economic, or ideological.
- **Unity of effort.** The multidimensional (military, political, economic, and social) reality of LIC requires an integrated national policy and strategy.
- **Adaptability.** Policies, strategies, doctrine, and force structures employed in response to a particular LIC challenge should be adapted to the nature and needs of the country or region addressed. Adaptability implies more than just tailoring or flexibility, terms that imply the same techniques or structures can be employed in multiple situations if chosen selectively. Modification is more often required. Adaptability means we must develop techniques and structures that have the capacity to adapt to different conditions.
- **The legitimacy of our interest and our efforts.** In nearly every low intensity conflict situation the legitimacy of a given group within a society is being challenged. It may be as simple as the "ins" versus the "outs", or as complex as religious fundamentalism resisting modernism. Our ability to justify our involvement in a low intensity conflict situation at home and abroad is linked to the legitimacy of those we wish to support.
- **Patience.** LIC is by nature a protracted affair. Even those short, sharp, contingency-type encounters that do occur are better assessed in the context of their contribution to long-term objectives. It is often better to forego opportunities for immediate, demonstrative, tactical success to secure larger aims.

Should the United States have to become involved in a low intensity conflict, it must approach it with the realization that terrorism, politically motivated sabotage, subversion, insurgency, and paramilitary criminality are not transient phenomena. We can fail to establish long-range policies for dealing with them only to our peril. Our reverses in dealing with such a conflict will be instantly newsworthy; our successes slow and little noted. Potential opponents are already in place: there are literally thousands of saboteurs, terrorists, and insurgents, many the product of years of conditioning for hostility to the United States, and of patient, painstaking training for violence. These antagonists are armed, dedicated to their cause, and dangerous. It is impossible to predict, for long-term

planning, when and where that sort of adversary will choose to strike, but we can prepare assuming that there will be frequent instances in which they could threaten U.S. interests.

In such circumstances, the United States can not expect to defend those interests wholly on its own. Usually, an adversary's animus will be directed in the first instance against a government we support, and our most effective response will be to aid that government in using its laws and security mechanisms against these aggressors.

Moreover, since our strategy hinges on supporting a friend or ally, that nation and its armed forces, or that group of Freedom Fighters, must be induced to behavior compatible with our own high standards of respect for human rights and avoidance of injury to non-belligerents. Supporting any nation or group that behaves otherwise will pose difficult, virtually insurmountable problems for any President, no matter what his standing with Congress and the American people, and in the end such a nation or group would probably not succeed.

However well our friends do conduct their campaigns, we must be mindful that opposing them will be shadowy foes, to whom treachery, deceit, and ruthless violence are ingrained principles of war. Progress will be slow, often undetectable, and reverses will come often. The aided government, just by accepting our help, will often incur added risk and will often require assurances of enduring U.S. support during the years it will need to defeat its enemies, and to eliminate the political, economic, or social conditions that fostered their growth. Such indirection and snail-like progress ill-suits our national temperament and will try our national patience. An effective U.S. response to low intensity conflict requires the national will to sustain long-term commitments.

2. Discriminate Deterrence

The preferred strategic course for the United States is to remain aloof from conflict in the Third World. Most conflict there will not engage U.S. interests in any important way. However we may deplore the violence, we should, if we can, avoid altogether its quarrels and conflicts. If we cannot, we should limit our involvement to the least efficacious level--discriminate deterrence.

The United States is not likely, over the next 20 years, to undertake a major, protracted, conventional war against any Third World adversary. Our national strategy should be to obviate such uses of U.S. combat forces by helping others to defend themselves. But declaratory policies of "no use" or "never" could have the effect of

lowering deterrence, of inviting would-be attackers to believe that no matter what they did, the United States would not act militarily against them. Moreover, the United States has many commitments to defend allies abroad, and there may come a time when the only practical response to an aggression against them is to commit U.S. forces to combat. Against that sort of contingency, we should maintain robust, strategically mobile General Purpose Forces capable of striking swiftly and decisively, so that the duration of the combat will be short, and the outcome soon evident. (But we need to be clear in our own thinking that such actions are unlikely to fit the definition of low intensity conflict, or to be regarded by any participants as such.)

Such was the strategy we adopted in the case of the war between Iran and Iraq. One of the longest wars of our generation, marked by the use of advanced ordnance on both sides, it has already caused over 1 million casualties and devastated the economies of both belligerents. Neutrality was a sound U.S. strategy. Unfortunately, fighting spread to include attacks on ships of non-belligerents transiting the Persian Gulf, carrying the oil essential to our allies in Europe and Northeast Asia. At that juncture, the United States acted to protect its interests and its own ships there, and did so in a way that made it evident that U.S. forces would act to defend themselves and neutral shipping against all acts of war, including striking preemptively if need be. We wanted to keep the oil flowing; we wanted to encourage our friends in the region, and our allies elsewhere, to associate themselves with us. We did not want to enter the regional conflict. The revised U.S. strategy rested on our deploying a force capable of eliminating threats by precise counteraction, so that by using discriminate force we could deter any belligerent from impairing freedom of the seas, or otherwise broadening the conflict.

Other circumstances have arisen in which U.S. interests dictated our assuming a direct role to forestall or limit regional conflict by inducing in a prospective aggressor an awareness of heightened risk and costs. There are a number of recent examples of such a strategy applied to low intensity conflict, such as U.S. military responses to Libyan terrorism and other provocations.

The instance of Central America is instructive. In early summer 1983, amid doubts about the very survival of fragile democracies there, many Central American leaders--and a number of U.S. observers as well--had concluded that a regional war was possible. Cuban and East Europeans were pressing construction night and day on a large new air field at Punta Huete, Nicaragua, a very long concrete runway capable of landing the heaviest Soviet aircraft, with extensive fuel storage, and revetments for a squadron of jet fighters.

The Sandinista Army was bombarding Honduras with 122mm. Soviet-made artillery and rockets and had positioned forward Soviet-supplied tanks and armored personnel carriers. One Honduran general expressed the fear that, literally in hours, the Sandinistas could drive along the Pan American Highway through Honduras into El Salvador to link up with an anticipated final offensive by the guerrillas--a replay of Giap's final offensive in South Vietnam. While U.S. estimates assigned a low probability to such an aggression, it is true that such a thrust would have had a decisive strategic impact on Honduras: it would cut that nation off from the Pacific, and position the Nicaraguans to dictate the end of Honduran support for "Contras" and to resolve in its favor long-standing border quarrels. Honduras was on the verge of national mobilization, and the Salvadoran Army was torn between prosecuting its internal war against increasingly powerful guerrilla units and readying itself to defend against a Nicaraguan armored onslaught from the south.

In that circumstance, the United States adopted a deterrent strategy aimed at bolstering our friends and instilling caution in their foes: a warning was repeated that the United States would not tolerate advanced aircraft in Nicaragua. A U.S. carrier battle group appeared off the Pacific coast, and U.S. Air Force aircraft, specialized for top-down attack of armored vehicles, landed in Honduras. U.S. troops were sent to train Hondurans in constructing antiarmor defenses along the Pan American Highway and to participate in a newly built, regional military training center on the north coast of Honduras. At the highest level, the United States provided strong reassurances to both Salvadoran and Honduran leaders, urging on them priority for internal defense and development rather than preparations for regional conflict.

Assessing deterrence is difficult at best, for claims that the strategy succeeded must skirt the fallacy *post hoc, ergo propter hoc*. But in this case, the Salvadorans turned their attention from the feared invasion by Sandinista armor back to their real war and to the National Plan they had drawn up with U.S. assistance. The Hondurans pulled back from the border and commenced constructive training exercises with U.S. forces. Punta Huete airfield remained unused, and the Sandinista armor withdrew southward. Deterrence, then, seems to have had the effect of limiting the conflict in terms of intensity, and, by narrowing the options for a would-be aggressor, created a context within which U.S. allies could pursue their own strategic objectives--offensive in the case of the Salvadorans, defensive in the case of the Hondurans. Whether or not U.S. actions intimidated the Sandinistas and their communist backers, they had the effect of heartening democratic friends throughout the region.

In some comparable situations in the future, we will have little choice other than involvement. Neither passivity nor indifference will shield U.S. national interests. Whether or not we Americans choose to recognize our circumstances, nations and peoples all over the world are at war with this country, and now, and for the foreseeable future, American citizens face threats to life and property in conditions of "not-war, not-peace" never contemplated by the framers of the Constitution, nor adequately provided for since by the Congress.

The strategic crux of the matter is selecting the time, place, and manner for U.S. involvement. We should carefully limit involvements in number and kind--we should be seldom involved, and then committed minimally. We should choose carefully when and where. Above all, we should avoid involvement altogether unless we have some real prospect of succeeding. Consistent with sound strategies throughout history, once involved our moves should be both offensive and defensive, our determination unmistakable, our vigilance unflagging, our tactics inscrutable.

If it could muster the patience and persistence, the United States could pursue a strategy of selective involvement in the Third World with the expectation that time would be on our side. We can be certain that, in the long run, we will expand our associations with like-minded nations, for the American people share with the majority of mankind a repugnance for political violence, a respect for the dignity of the individual and the rule of law, and a yearning for peace among nations. If the United States can protect its own security and lead others to cooperate in maintaining an environment of reasonable stability, open trade, and communication throughout the Third World, political, economic, and social forces there will eventually work to our strategic advantage.

B. USE U.S. FORCES INDIRECTLY

The United States should not commit its forces to combat in the Third World unless it can do so decisively, swiftly, and with discrimination. The employment of U.S. armed forces in combat roles in the Third World should be regarded as an exceptional event. Where we have treaty obligations to an ally, we might position combined forces to exploit respective comparative advantages and to deter aggression--as we did in South Korea. But overall, our strategy should emphasize using U.S. forces to complement U.S. security assistance, exploiting their potential for helping friendly forces engaged in low intensity conflict with training, intelligence, communications, transportation, construction, medicine, logistics, and management. In particular, the United States should put its military medical

and engineer units--expressly designed for performing their missions anywhere in the world--to work helping nations we want to support.

Low intensity conflict is qualitatively different from the kinds of wars for which the U.S. armed services have traditionally prepared. The American view of war, which has served us well for more than 200 years, has led the Services to design forces, equipment, and doctrine for direct engagement of a foreign force and for defeating it decisively by combat operations. Low intensity conflict calls for intrinsically indirect operations, that is, support for objectives fundamentally political, economic, or psychological in nature. This is most clearly the case when the United States is using security assistance. Across the range of possible U.S. military operations in low intensity conflict, our tactical purposes are likely to be dominated by non-military considerations. This creates an operational environment different from conventional warfare, described in U.S. Army regulations as "operations short of war". Yet neither the U.S. Army nor any other of the U.S. armed services have considered such operations sufficiently in developing doctrine, training programs, force structure, or materiel.

U.S. force structure, equipment, and doctrine, designed for accustomed combatant missions, are not well-suited to pursuing non-combat roles in assisting any Third World nation. Usually, the presence of any foreign military force stirs nationalist abhorrence in a Third World country, and in some places (e.g., Central America), U.S. military forces operate encumbered by historical burdens, so that their mere presence creates political problems for a host nation. U.S. General Purpose Forces are usually too heavily or inappropriately equipped, and too elaborately manned, for probable Third World missions--prepared as they are for the exigencies of high intensity conflict. Often they are not well-trained for such missions. Military roles in low intensity conflict are best performed by specially trained individuals or detachments, or by units as small and unobtrusive as is consistent with their mission.

Special Operations Forces (SOF), while often adept at low intensity conflict, are manned, trained, and equipped for higher intensity missions as well. In the past, SOF commanders have pointed out that commitment of SOF units to low intensity conflict can compromise their readiness for other strategic responsibilities.

Security assistance for low intensity conflict will require that the U.S. armed services develop materiel, tactics, and techniques different from those used by U.S. forces, tailored to the needs of the supported forces.

The foregoing statements frequently strike U.S. military officers, doctrinally conditioned to believe in the primacy of the combat function, as startlingly novel. These

concepts assign priority to such military functions as training, intelligence, communications, mobility, construction, medicine, and logistical support ahead of fire support or maneuver--an inversion commonplace in the writings of the theorists of unconventional warfare worldwide.

As the instances of Grenada, Tripoli, and the Persian Gulf serve to illustrate, there will be times in regional conflict when a President decides to use U.S. forces in combat. Such a decision will be made normally only *in extremis*, to deal with circumstances beyond other means. Armed interventions such as those in the Dominican Republic in 1965 and Grenada in 1983 (which this Working Group construes as beyond low intensity conflict) have major domestic and foreign policy implications, and cannot be undertaken lightly. The criteria for decision ought to include: can we succeed rapidly, with minimum cost and minimum damage? To ensure that the answer is affirmative, the United States must continue to develop the forces, doctrine, and tactical equipment capable of rapid, decisive, and efficiently discriminate combat in local conflict anywhere.

The development of military forces and capabilities for low intensity conflict, and for all other regional conflict, is the responsibility of the Joint Chiefs of Staff. The newly created Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, and the Special Operations Command have been assigned particular roles in readying forces. The regional Commanders-in-Chief, who plan for and direct employment of U.S. forces in the Third World, have been given new strategic authority and influence over Service procurement and force structure. In short, there are now organizations and individuals within the U.S. government who are able to bring before the National Command Authorities the issues that need to be resolved to ensure that our forces are capable of supporting U.S. strategy in the Third World.

C. REFORM U.S. SECURITY ASSISTANCE

The security assistance programs of the United States--referring to funds, goods, or services this country sent overseas to bolster the security of a friend or ally--have underwritten American foreign policy for 40 years, and are regarded worldwide as tangible evidence of American commitment to national independence and peaceful development.* The Marshall Plan, which Winston Churchill characterized as "the most unsordid act in all of human history", extended a broad range of assistance to nations struggling to recover

* For an extensive treatment of this topic, see the Regional Conflict Working Group's Paper for the Commission on Integrated Long-Term Strategy, Commitment to Freedom, Washington, May, 1988.

from the trauma of World War II. Every U.S. Administration since then has pursued a strategy of providing combined economic and security assistance to help nations of the Third World help themselves.

The needs of the recipients of our aid have changed less over time than we who have given it. In the years since the wars in Southeast Asia, the government of the United States has adopted legislation, policy, and procedures that have severely limited the flexibility and utility of its security assistance. While U.S. military aid served Presidents Truman, Eisenhower, Kennedy, and Johnson as a mainstay of policy, Presidents Nixon, Ford, Carter, and Reagan were increasingly constrained in its use. The next President will find that instrument a weak reed, less a pillar of national strength for supporting strategy in a violent and changing world than a wand-like symbol of domestic political sentiments and alignments, so encumbered with legal and administrative tendrils as to deprive it of credibility either here or abroad.

The billions of dollars the United States has invested in the readiness of its armed forces has not provided materiel or doctrine readily adaptable to the needs of Third World armed forces. To the contrary, insurgents and counterinsurgents may require different equipment from our own and different from one another. The tactics and techniques of insurgents and counterinsurgents are also quite different. Mobilizing U.S. ingenuity and technology on behalf of such requirements will require setting aside some of the presuppositions of our security assistance programs to date. If we are to do the job more effectively in the future, our assistance will not be a way of disposing of surplus or obsolescent U.S. equipment, nor of reducing the unit price of new equipment for a U.S. service because of larger buys to accommodate a foreign user. American industry may be only marginally involved; indeed, one of our objectives would be to use our outlays for assistance as an incentive to encourage other friends and allies in the manufacture of such equipment. Our assistance program should have a strong thrust toward endowing the aid recipient with self-sufficiency and self-reliance.

The United States government is likely to suffer grievous setbacks unless future Administrations are provided with improved means for protecting U.S. interests in the Third World. Current security assistance programs, variously legislated as Economic Support, Military Assistance, Foreign Military Sales Credits, or International Military Education and Training, are seriously underfunded for pursuing an integrated, long-term strategy, and too micromanaged by Congress to enable any Administration to deal with crises.

The strategy advocated by the Commission requires that the 101st Congress provide more security assistance funds with fewer restrictions. Also it must legislate 12 basic reforms of security assistance methods and means.

Congress should provide multiyear appropriations. A way must be found for legislating funds over a period of several years for support of Third World countries dependent upon U.S. foreign aid. Consistency of support over time is more important by far than any gross amount in a given year. Neither the U.S. Country Team (the in-country executive committee composed of the chief officers of all U.S. departments and agencies operating there, headed by the U.S. Ambassador) nor the supported nation can plan coherently, in an integrated way, without assurance of support over time.

Congress should appropriate more funds for foreign aid, and reallocate funds among aid claimants to provide more for developing nations threatened by low intensity conflict. Congress should recategorize such nations so that they may be treated in budget actions separately from Israel, Egypt, and the "base rights" countries.

Aid for politically fragile countries must not be allowed to fall below the threshold sum that permits pursuing some minimally effective program over the years. Current levels are now so low as to render programs meaningless. By lumping security assistance for less-developed nations afflicted with low intensity conflict in the same accounting category with Egypt, Israel, and the "base rights" countries when computing budget cuts, Congress affects the former disproportionately. Their programs deserve separate consideration on their own strategic merits.

The current security assistance pricing system, based on no monetary loss, must be scrapped in favor of pricing based on strategic gain. Rather than trying to recapitalize from the foreign aid allocated to poor allies and friends, the Congress should countenance actually subsidizing their procurement of U.S. military goods and services. If Government accountants cannot dispense with surcharges for non-recurring costs and program administration, then DoD should pay these as a cost of doing business. Congress should authorize a LIC catalog establishing favorable, fixed prices for U.S. goods and services for especially threatened developing nations.

Our law should permit, even encourage, more liberal leasing rather than purchase of major equipment. Leasing would give the United States more leverage over recipients than sales or grants and could be of strategic significance if our

long-term strategy includes demilitarization after the emergency for which the equipment is provided. Leasing would also be better for unforeseen, short-term needs.

Laws should provide security assistance recipients the opportunity to claim a trade-in allowance for worn-out or damaged equipment. We ought to accept old or damaged equipment in partial payment for new, or allow exchange of the latter for a new item plus depreciation and repair costs.

Security Assistance Offices (SAOs) for Third World countries should be reconstituted. Laws and DoD policy are precisely the inverse of what they ought to be. They currently operate to pare SAO manning in Third World countries threatened by low intensity conflict, and to limit the ability of SAOs to participate in host-nation planning. SAOs in those countries should serve the ambassador as on-the-scene representatives of the U.S. military, and the Commander-in-Chief (CINC) as an extension of his staff for the purpose of planning and professional role-modeling. The current practice of sending *ad hoc* teams of trainers or technicians to SAOs is demonstrably less effective than providing cohesive groups from the same unit, prepared together for their mission. Laws and procedures should be changed to assure U.S. ambassadors and the regional commanders-in-chief of personnel capable of discharging planning and representational responsibilities, as well as administering security assistance. DoD should revamp its methods of fielding trainers and technicians in the Third World to provide better for teamwork and continuity.

The CINCs must be more thoroughly involved with security assistance planning and operations and with explaining and defending the program within the Executive Branch, with Congress, and with the public. Commanders-in-Chief of the U.S. regional combatant commands ought to play a more important role in planning and administering security assistance than has been the practice in some Third World countries. In particular, each CINC must set regionally coordinated strategic objectives, and provide quality assurance over SAO operations in the countries under his purview.

DoD training exercises should be used to help allies and friends in the Third World. Combined U.S./host nation military exercises are a cheap and effective way to provide economic, humanitarian, and military assistance to Third World allies and friends. At the same time, such exercises afford U.S. participants valuable, virtually irreplaceable training.

Congress must forego the conditionality that cripples International Military Education and Training (IMET) for potential leaders in Third World nations. Congress has imposed numerous legislative sanctions that foreclose IMET training in the United States for military leaders of particular countries. The irony of such sanctions is that they often cut off communications with precisely those individuals we wish most to influence.

Congress should broaden the use of security assistance for police training. Police, which in the Third World are often part of a nation's defense forces, are an essential infrastructure for waging low intensity war precisely because they can carry out investigative and protective functions for which military forces are seldom trained. Police professionalism is important for respect for human rights and for sound intelligence collection.

The United States should tailor and improve support for countries fighting insurgency. Standard military equipment in use in the U.S. armed services is often too expensive and too complicated for use by Third World countries. We must find ways to develop and to provide relevant equipment--especially discriminate fire support--and to aid supported nations to self-sufficiency when we can. Congress should provide the authorization and funds for the U.S. armed services to modernize allied stocks of serviceable equipment obsolete by U.S. standards.

Congress should authorize use of security assistance funds for procurement of foreign-manufactured equipment. "Buy American" provisions of current law are dysfunctional in some Third World nations where foreign-manufactured equipment is more cost-effective. Off-shore purchases with U.S. funds might also provide incentives for cooperative forces.

Any of the foregoing reforms would require extraordinary political leadership. But without such leadership, our richer, more capable allies and friends will not be encouraged to invest more of their resources in assistance programs in the developing world in support of common interests; the United States will not invest systematically in the research and development of technologies responsive to the foreseeable security requirements of Third World friends and allies; and U.S. Ambassadors and CINCs will continue to be frustrated by the tangle of security assistance laws and regulations that enmesh strategy, rather than support it.

The security assistance system--referring to all those in the Administration and in Congress who deal with that aspect of foreign aid--is quite unlikely to reform itself. In fact, aspects of the system that are dysfunctional for U.S. strategy among developing nations are now embedded in the bureaucracy that administers the system. Reform will require a painful realignment not only within that bureaucracy, but also within all Government departments and agencies concerned with the formulation and execution of foreign policy and national strategy. Hence, the Secretary of State, should cooperate with Congress to bring about the requisite new laws, and through his Assistant Secretaries in charge of Third World regions, should provide the interagency leadership to reinstate security assistance as a powerful instrument of policy, and to integrate it with other elements of our national strategy.

D. HELP OTHERS HELP THEMSELVES

Usually the United States has aided other nations in the Third World out of self-interest. Many, if not most, Americans believe, however, that the United States should pursue more generous objectives, that the foreign aid programs voted by Congress should assist our friends and allies in reducing the underlying causes of instability in the Third World, and in providing security to governments and peoples afflicted by low intensity conflict. Unfortunately, U.S. laws and administrative procedures are not well structured to provide timely and effective assistance for victims of Third World violence. Congress might wish to consider legislating authority for the United States to use, outside the foreign aid framework of the Foreign Assistance Act and the Arms Control Export Act, elements of U.S. national strength for the purposes of (1) promoting cooperative action among free nations to help threatened mutual friends, (2) providing U.S. humanitarian aid in the form of public health assistance and support for infrastructure development, (3) furnishing informational support, and (4) promoting respect for human rights.

U.S. Foreign Assistance, the development and security aid voted annually by the Congress, usually involves heated debate and complicated parliamentary maneuvers. Initiating new kinds or amounts of aid for a given country usually means that support for others will have to be pared back or cancelled altogether. Planning a coherent, multiyear program of assistance for any Third World ally confronting low intensity conflict, employing the entire range of U.S. policy instruments, is difficult at best, given the intensity of the Congressional contests for each year's foreign aid appropriations and the domestic political considerations that tend to dominate its voting. However, there are

undertakings of strategic significance that might be separately considered and approved by Congress.

I. Cooperative Action

The capabilities of the United States are complementary to those of many Third World nations, and our interests are often mutual. We have been remiss in not recognizing that even impoverished Third World allies could help in significant ways. Nor have we made good use of contributions that might be made for the common cause by our well-to-do allies in Europe and Northeast Asia. We ought to develop ways to make the best use of the capabilities of all the countries that have mutual interests in promoting human rights, pluralism, open societies, and the diminution of Soviet and Cuban influence in the Third World.

The Rand Corporation recently organized two conferences on cooperative action in the Third World.* These conferences concluded that the United States and its Third World allies and friends do indeed share important strategic objectives, and have much to gain by developing ways to share burdens and to achieve a more efficient division of labor. The United States should concentrate on providing the inputs we are best suited for, and on helping allies or friendly nations to develop their own capabilities.

The Rand conferences concluded that changes in U.S. policy and organization are needed at three levels if the Free World is to use cooperative forces. First, the Congress would have to endorse an Administration policy statement encouraging wider Third World participation in efforts to oppose militarization of the Third World by the Soviets or their proxies. Second, the Congress and the Administration need to reform foreign aid so that the United States makes better use of its own policy instruments--including security assistance and military training exercises. And third, on a tailored, case-by-case basis, Congress needs to provide the Administration the authority and the resources to provide incentives and support for cooperative action.

Much U.S. effort in the Third World will have to be directed at obtaining military aid to protect the independence of nations in conflict. But, in virtually every instance, we should also encourage and support the better positioned Third World countries in contributing to such aid. Examples of support provided by Third World countries are the

¹* Wolf, Charles, and Webb, Katherine W., eds., Developing Cooperative Forces in the Third World. Lexington, MA, Lexington Books, 1987.

training and aid provided by Latin American countries to the democratic government in El Salvador and the use of Moroccan troops to prevent anarchy and terrorism in Katanga. The United States has very inadequate policies and instruments for promoting such use of cooperative forces.

The United States should also encourage more sharing of Third World burdens, including military assistance, by our allies of the Northern Hemisphere. This will make more resources available to promote independence and democracy in the Third World, and will make better use of the special capabilities of Japan and some of our NATO allies. For example, France and Britain have historic cultural links with many African and Asian countries and should take the lead in helping friends there. Recent French actions in Chad are a case in point. Japan, although constrained in its conventional military capabilities, could provide aid with communications, transportation, and specialized equipment, like heavy construction machinery and maintenance for the same. Japan clearly could do much to promote economic growth in any developing country. For example, on the one hand Japan has increasing trade with Vietnam and is considering subsidized loans. On the other hand, Japan has not been a principal provider in Central America, despite its strategic interest in the Panama Canal and the region's natural resources. The United States must obtain agreement among all its allies that economic progress in the Third World is both sound strategy and good business.

2. Humanitarian Aid

American military medical and engineering skills are respected worldwide. The branches of our military services dedicated to medicine and engineering have often proven their mettle in the Third World through quick response to natural disasters. To meet our national objective of eliminating the underlying causes of conflict, the United States ought to employ these capabilities to help Third World nations cope with the longer range problems of public health and national infrastructure. While we would not proffer such help indiscriminately, effective humanitarian aid is one way the United States can be truly relevant and influential in support of nations we consider in our strategic interests. Much useful aid could be provided in the form of a few expert consultants. If "hands-on" help were indicated, we should respond with deployments of limited duration, with the objective of developing local capabilities to deal competently with the situation after we depart.

a. Military Medical Support

Recent United States experience in El Salvador provides a useful illustration of how military medical help can make a significant difference. In 1983, when the U.S. Army sent its first medical mobile training team to El Salvador under security assistance, the mortality among Salvadoran soldiers wounded in action was 45 percent--over 8 times the rate considered acceptable for our own armed forces. The medical situation in El Salvador was like that in many other Third World countries: there was neither a shortage of trained doctors, nor a dearth of well-equipped hospitals, but rather maldistributed medical capacity, most of it in cities. What the Salvadoran armed forces lacked were rudimentary concepts of field sanitation and battle-casualty evacuation. They had no medical service corps to attend to either, and little appropriate equipment or supplies--a country that exported cotton cloth had a shortage of field bandages! U.S. military medics began to teach first aid and evacuation procedures and provided modest medical materiel. As a result of small amounts of U.S. military medical assistance, the mortality rate among Salvadoran wounded decreased to 5 percent. Improved medical care had a salutary effect on Salvadoran soldier morale, and equally important, obviated broader recruitment and training to replace soldiers who died unnecessarily of wounds.

A second example is public health assistance in Honduras. U.S. military medical personnel, serving in Honduras since 1983, seized upon a unique opportunity to engage in humanitarian assistance programs while conducting their own medical readiness training. Honduras's population is dispersed throughout mountainous territory devoid of all but primitive roads and trails. The Honduran government had little ability to address large-scale public health programs like general immunization. During the past 4 years, U.S. military medical personnel, using their own transportation and communications, but acting in conjunction with the Honduran Ministry of Health and the World Health Organization of the United Nations, performed over 350,000 immunizations, provided primary medical care to over 250,000 patients, and dental care to over 150,000. In addition, they provided veterinary care and assisted in sanitation and disease education. The cost to the United States was quite low--for example, expendable medical supplies consumed cost less than \$180,000--yet the undertaking provided invaluable training for U.S. forces, and unprecedented hands-on experience for Honduran public health officials, as well as contributing substantively to the health of the people.

A third example cites assistance the United States has not provided, but ought to offer. There are over 3 million Afghan refugees in Pakistan, among them tens of

thousands of victims of Soviet mines--many of them women and children. Providing medical support for these people would provide major returns for U.S. strategic interests far beyond any monetary costs entailed. The United States might arrange with the government of Pakistan to deploy a mobile Army surgical hospital to provide general medical and surgical support for the Afghan refugees. The hospital would prepare, through surgery, amputees for prosthetic devices, train technicians in the construction and fitting of these devices, and supplement the training of local doctors and nurses. The Office of the Surgeon General of the Army estimates that such a hospital of 80+ U.S. military personnel could be deployed to Pakistan for less than \$500,000 dollars per annum.*

In all cases like those cited, the direct return for U.S. involvement would be substantial. U.S. military medics receive training in practicing in austere field conditions upon disease and trauma they would seldom encounter in U.S. hospitals. U.S. medical equipment procured for war, but seldom used in peace, receives realistic field trial (in Honduras a portable field x-ray machine developed by the Army at a cost of several millions proved to be awkward for use on traumatized patients--a discovery that may save lives on future battlefields). For the individuals and units involved, readiness for wartime missions in support of U.S. forces is substantially improved. Also, U.S. strategic interests are well served.

b. Military Engineering Support

Physical infrastructure--roads, bridges, water supplies, dams and levees for flood control, and the like--figures prominently in Third World conflict. Often in an internal war, that infrastructure becomes a strategic objective for both sides, one seeking to destroy it, the other to defend it. Its absence becomes a source of popular discontent, a breeding ground for disaffection and violence. Often its presence becomes the very stuff of government, the only embodiment for rural people of their national government. While the simplicity, ruggedness, and capability of modern heavy construction equipment has endowed many Third World countries with substantial indigenous engineering capabilities, these--like medical capacity--tend to be used in and around cities. Local contractors avoid rural areas threatened with political violence, so that often where a government needs

* OTSG estimate for the RCWG was based on a two operating-room surgical hospital, packed as 15,000 cubic feet of cargo, weighing 130 tons, procurement cost \$1.3 million. Air transportation costs would be \$400,000; sea transportation \$71,000. Operating costs, \$30,000 per month. Calculations do not include pay or allowances for U.S. military personnel.

engineering support the most, it has none available. Hence, military engineers are in high demand, and U.S. military engineers, whether acting as advisers, trainers, or actual constructors, can render very significant assistance.

How U.S. military engineers might be used in a given country would, of course, be dependent on both U.S. strategy for the region and the needs and desires of the host country. The United States Country Team preferably would plan military engineer commitments in two phases as part of a long-range national plan developed with the host nation. The first phase would be to help provide a security shield to allow the government breathing space and to implant or revive democracy in conflicted areas. The second phase would be to develop self-sufficiency. Engineer contributions for either phase could be tailored, ranging from the actual use of U.S. military engineers, to providing training, or furnishing technical and engineering management assistance.

An example of the use of these policy instruments in support of the first phase would be to assist the host country military in developing an engineer force structure to provide both combat support to combat forces and a capability to conduct civic action and other nation building tasks. U.S. military engineer supervision of the use of security assistance funds to purchase engineer equipment and to provide construction by contractors for training centers, cantonments, hospitals, and other needed military facilities, as has been done in El Salvador, is another example.

Engineer contributions to the second phase--developing self-sufficiency--centers on technical assistance for nation building. This can include both joint-venture funding of projects using U.S. Agency for International Development (USAID) money, Economic Support Funds, and security assistance, together with host country funds to procure needed engineer material, construction equipment, and repair parts.

As is the case with military medics, military engineers put to such tasks are afforded rare opportunities to use their skills. U.S. engineer equipment intended for wartime use, but seldom exercised in peacetime, is put to credible test--an example comparable to the x-ray machine previously cited is the well-digging and water-purification equipment procured for use in Southwest Asia contingencies that also proved problematic in Honduras.

3. Promote Respect for Human Rights

The United States should use its influence and technology to promote human rights. There are two principal ways the United States military can contribute: (1) through U.S.

training programs that are designed to instill professionalism and the conviction that abuse of civilians, or other disregard for human rights, is militarily dysfunctional (In El Salvador, such training, along with much direct U.S. advice, combined with the leadership of Jose Napoleon Duarte, dramatically reduced incidents of human rights violations.) and (2) through U.S. targeting means and discriminate weapons to help an ally avoid collateral damage and casualties among innocent civilians.

Usually, programs that increase the accuracy of supporting fires will both increase military effectiveness and reduce the number of civilians killed in the fighting. A case in point is the AC-47 gunship that the United States provided to El Salvador. In the first years of the war, the Salvadoran military's primary air weapons against the guerrillas were fighter aircraft armed with 500-pound, general-purpose, high-explosive bombs that, although rarely effective against insurgents, could cause serious collateral damage to houses, churches, and civic buildings and inflict casualties among innocents caught in the bombardment. The United States Country Team decided in 1983 to provide more accurate gunships (AC-47s and armed helicopters), which would equip the Salvadorans with more discriminating fire support for use against guerrillas while avoiding collateral civil damage. Unfortunately, 2 years passed between the time AC-47s were first proposed and their receipt by El Salvador. The program ran into stiff opposition from some in Congress who were concerned that the United States would be escalating the war by introducing a new form of ordnance. The program was also delayed by the reluctance of the U.S. armed services to provide to an ally equipment that was not standard issue, on the grounds that such systems made training and logistic support more difficult to provide.

Several lessons can be drawn from this illustration: (1) Steps to reduce collateral damage will usually be the same steps needed to increase military effectiveness in low intensity conflict. (2) These steps will be opposed by some out of a confused concern for human rights. (3) Even when the U.S. regional Commander-in-Chief clearly sees the need to reduce collateral damage, he may have a hard time eliciting non-standard weapons from the U.S. armed services. (4) Reducing chances of collateral damage often does not require very advanced technology. Nonetheless, developing countries do need U.S. help in this regard; an AC-47 gunship is unsophisticated, but the Salvadorans could not have developed it on their own. (5) Encouraging respect for human rights often requires intimate, long-term involvement in a country and the development of mutual respect and understanding. Restrictions on U.S. face-to-face training for Third World military

officers, on the ground in El Salvador or in the United States through security assistance, have much weakened our influence.

4. Informational Support

Every nation has the right and obligation to inform its people of its policies and to explain them to the world. Exploiting modern media to extend a government's informational reach to all of its people would constitute a revolutionary advance for many Third World nations. U.S. expertise with the print and broadcast media brought to the service of a friend or ally could strengthen them against subversion or other internal threats and help them to elicit international understanding and cooperation. Here is another area where cooperation by U.S. friends and allies could be most useful.

Many a Third World country, with fragile political institutions and beset with ethnic and cultural tensions, is vulnerable to the manipulation of public opinion both domestically and abroad. Such a country is often largely dependent upon foreign assistance in every area from capital investment to technical advice. The image it creates of its needs, of its ability to absorb assistance from abroad, and of its respect for human rights and democracy could determine how much support it obtains, either from the United States or from other cooperative states. It also faces the problem of self-image, the requirement to explain its policies, and the need to win the support of its own people. It needs not propaganda, but a way to tell its story timely, accurately, and understandably.

It is not enough for a government to be able to interact well with foreign representatives of the sophisticated print and electronic media. It must develop informational programs addressing the day-to-day needs of its own people and provide them means for receiving its messages. Its soldiers must be made to understand and believe in their mission; its people must be helped to appreciate and support its soldiers.

Here is opportunity for U.S. skill and technology. Low-cost, single-channel radio and television receivers, possibly solar-powered, might provide that government with important access to and influence over rural populations. American industry--and if not U.S. manufacturers, then Japanese, Korean, or Taiwanese--has the capability of making such products, but little incentive to do so, in the absence of U.S. government support. We have in the U.S. government, for example in the U.S. Information Agency, and in the U.S. armed services, men and women trained and experienced in meeting the informational

needs of such a country. What we lack is a legal and procedural framework for integrating use of their knowledge in support of national strategy.

E. DEVELOP ALTERNATIVES FOR U.S. THIRD WORLD BASES

The difficulties encountered in the past decade by Presidents Carter and Reagan in obtaining bases in Southwest Asia from which to use U.S. military forces to protect oil shipments from the Persian Gulf foreshadow those their successors will almost certainly face. By the first decade of the next century, there is reason to believe that certain major United States bases in Third World nations will have been closed. At the same time, as recent events in Southwest Asia make amply evident, we will probably have, as we do now, many unfilled requirements for bases in the Third World, bases needed to exploit the full capabilities of all the U.S. armed services.

In 1947, there were some 450 "base sites" overseas, meaning places at least partially funded by the United States, regularly in use by U.S. forces, and identifiable as a U.S. base. Today there are less than 120 of these--mostly within NATO. The differential largely reflects U.S. base closings in the Third World. As U.S. bases--referring to recognizably American military installations--diminished in number, so also did unconstrained U.S. access to foreign airspace for overflight and airfields or ports for transiting forces. The Commission has noted the profound change in U.S.-Soviet strategic access circumstances from 30 years ago: once again, as our options in the Third World have narrowed, theirs have expanded.

Therefore, the United States must now begin seriously to develop, by exploiting all the ingenuity of its scientists and engineers, alternative ways of performing the functions for which U.S. forces have heretofore depended upon terrestrial facilities in the Third World: support of forward-deployed forces, staging and sustainment of reinforcements, and command, control, communications, and intelligence.

Of course, national strategy has, throughout this century, relied on the range and striking power of the U.S. Navy and the U.S. Marine Corps. The sea Services are well practiced in configuring, training, deploying, and sustaining task-oriented forces with minimum profile for Third World missions. Navy and Marine forces, however, are limited in numbers and have worldwide responsibilities, including posing the principal counter to Soviet naval power. For missions in low intensity conflict, the United States' ability to draw upon Army and Air Force capabilities will remain important as well. In turn, these

forces will require overseas basing in some form, or their adaptation to operations from the sea.

The current U.S. basing agreement with the Philippine Republic expires in 1991, and thereafter U.S. forces at Clark Air Force Base and Subic Bay will be subject to removal upon 1 year's notice. The Panama Canal Treaty, which entered into force in 1979, mandates closing of all U.S. military bases in Panama by the end of 1999. While there is a possibility in either of these cases that negotiations *ad interim* could extend U.S. tenancy or lead to opening comparable U.S. installations elsewhere, the United States can not count on such favorable outcomes and must be prepared in the future to support national strategy with fewer, or perhaps no, such footholds.

Strategic prudence, then, urges preparing to operate with less dependence upon Third World bases and access to foreign ports, airfields, and airspace. The United States should look now for alternatives in both how we operate and where we operate: by developing our full maritime and amphibious potential, by novel structuring of land and air units, by building long-endurance aircraft and airships, by providing highly discriminate weapon systems of intercontinental reach, and by using space platforms.

I. Restructuring Land and Air Forces for Third World Missions

During World War II, U.S. strategists carved up the world beyond U.S. borders into Theaters of Operations, fiefdoms for regional Commanders-in-Chief. The latter were expected to develop a pronounced degree of geographic independence by building bases or theater infrastructure--ports, airfields, maintenance, supply, and personnel depots, and intratheater transportation means. To a large measure, strategy in that war tended to turn on bases, as in the naval operations to seize advanced bases on the Pacific islands or in the European land campaign to open and defend the ports of the Rhein estuary.

Low intensity conflict requires much more subtle support arrangements. Few Third World nations are mature enough to accept the apparent surrender of sovereignty associated with turning over to United States forces ports, airfields, or other territory. Even granting overflight rights to U.S. military aircraft proves difficult for most. Indeed, the difficulties the United States faces in negotiating bases and base rights in some countries in the free world's strongest alliance--NATO--are closely watched by states in the Third World, and any U.S. concession there tends to be reflected in demands in other countries. U.S. overseas bases readily provide a focus for xenophobes, nationalists, and religious

fundamentalists, and the political dynamics of Third World governments seem to assure that future discussions of basing agreements will be even more contentious than those of the recent past. The inflationary impact of American dollars on weak economies, the cultural impact of American servicemen on traditional societies, the fear of AIDS (usually by all parties), and the inevitable charges by the domestic opposition that a cooperating government has become a Yankee "puppet", combine to make granting access or base rights a politically risky undertaking for any Third World government.

Moreover, any U.S. military unit, whether on a U.S. overseas base or simply operating temporarily on the territory of a Third World nation, becomes a magnet for saboteurs, terrorists, and political demonstrators of all stripes. The Beirut disaster of October 1983 exemplifies the danger to American service personnel in countries afflicted with low intensity conflict. Security measures taken to protect U.S. forces against terrorist attack often have the disadvantages of curtailing any economic benefit residents might otherwise receive from the U.S. presence and interfering with developing friendly relations.

Recent experience with supporting U.S. units in Third World nations where there are no U.S. bases has been troublesome. When it has been necessary to send U.S. military units into a Third World country, usually the U.S. Country Team will seek permission from the host government to use part of an existing base of the host armed forces. If that permission is granted, U.S. forces are usually expected to upgrade existing facilities. For example, in Honduras over \$40 million has been spent in a period of 5 years to transform largely undeveloped land at the Honduran Air Force Base at Palmerola into a cantonment minimally suited for U.S. units sent there to support combined exercises and U.S. operations. Built to temporary construction standards, the U.S. camp at Palmerola has evolved over the years from tents to wooden huts and relocatable shelters. Much of the time lag involved was dictated by the lengthy Congressional process for approving military construction funding, and to Congressional doubts over the President's policy.

Permanent construction in such circumstances is neither desirable, nor likely to be approved by Congress unless it can be presented as part of a coherent long-term plan for aiding the host nation. But U.S. temporary construction techniques leave much to be desired. The sandbag, that bane of the World War I doughboy, is still used in profusion to protect personnel and facilities, despite its propensity to sag and deteriorate, and its vulnerability to modern ordnance. Concertina barbed wire still delineates secured areas, more of an irritant than a barrier to anyone wishing to penetrate it. The traditional canvas

tents that are still part of the impedimenta of most U.S. military units have major drawbacks in most of the Third World: they are hot and dank; vulnerable to insects and reptiles; susceptible to wind and solar damage, mildew, and rot; and expensive to repair or replace. It is often more efficient to use temporary structures built with locally procured materials--e.g., screen-sided huts built with Honduran lumber--or to bring prefabricated, transportable structures. And we should find better security mainstays than sandbags and concertina.

This leads to the following three proposals for configuring air and land force units for low intensity conflict in the Third World.

a. Units Should Be Echeloned Rearward

Traditional assumptions for organizing and equipping U.S. Army and Air Force units for operations overseas are that the entire outfit, bag and baggage, will be transported from the Continental United States (CONUS) to an overseas theater. Because intertheater communications are regarded as a scarce resource, and tenuous at best, severance with the base of origin in CONUS is expected to be virtually complete. Overseas, the Theater Commander provides the unit some support, especially in furnishing expendable supplies, food and spare parts, but by and large the unit is expected to be functionally self-sufficient--to provide facilities for its own functionally independent operations and to provide for the health and welfare of its own personnel.

All these notions are invalid in most Third World nations, particularly one in which there is a low intensity conflict threat. The fewer U.S. personnel deployed forward, the better. Theater infrastructure is likely to be minimal to non-existent. The burdens imposed on the host nation and the gaining CINC by each deployed U.S. serviceman or servicewoman argue for restricting numbers to those essential to performing the mission. The unit itself should be configured so that it can operate in echelons, with that portion of the unit sent forward into the country of interest restrained in manning and equipment to the minimum necessary, and the remainder positioned on board a ship operating in nearby international waters or retained in CONUS. Echelonment dictates dedicated communications capabilities for the transmittal of voice, imagery, and data and may entail exceptional transportation support, e.g., helicopter service between ship and shore echelons or regular intercontinental airlift between overseas and CONUS echelons.

Echelonment has been tried, and it can work. In Honduras, an Army communications unit arrived in 1984 with over 500 personnel and almost 100 motor

vehicles, some quite large and heavy. After a brief trial, the CINC sent the unit back to CONUS with a directive that it be reconfigured into forward and rear echelons, the latter to remain in CONUS, linked to the former by satellite radio channels. Upon redeployment, the unit's presence in Honduras was reduced to about 10 percent of what it had been, and it performed its mission better than before. The unit's CONUS echelon--at its home stations--operated at the same operational pace as the forward echelon, and training, productivity, and readiness advanced day-by-day just as it might have with the whole organization overseas.

A medical unit, or a maintenance unit, both dependent on a pool of experts readily at hand to supplement or replace personnel in the forward echelon, might better be split between a ship off-shore and a detachment in-country. The forward echelon in that instance would be performing an assessment and management function, disposing of routine problems on the spot, calling for help when necessary, or evacuating serious cases to the shipboard echelon.

The relatively new technologies of secure, interactive image communications, which make possible audio and visual conferencing centered on high-resolution digital images of documents or other imagery, are particularly relevant to the concept of echelonment rearward. New, fully integrated, multipoint image communications systems, which operate over narrow band-width communications channels (e.g., voice-grade telephone lines), make feasible the echelonment rearward of the several levels of military headquarters. For example, using such systems, the U.S. Southern Command would be able to reduce its staff in Panama by about 85 percent. Almost 400 USSOUTHCOM staff personnel, plus their dependents, could today be restationed to the United States while maintaining normal staff planning and operational functions with small, forward-deployed elements in direct contact with the various host nations and U.S. officials in the region. Additional reductions of over 10,000 military personnel and dependents would be possible from the large Service components now stationed in Panama. Savings in overseas Permanent-Change-of-Station costs would more than pay for any systems acquisition, while the political advantages would be incalculably large.

The concept of echelonment rearward, supported by enhanced interactive image communications, also applies to other U.S. departments and agencies with overseas missions. The Department of State, for example, would be able to respond quickly to changing political, security, and physical (e.g., response to natural disasters) conditions without assigning additional staff personnel in the country.

b. New Forms of Temporary Shelter

Four related concepts should bear upon future decisions concerning facilities for the forward echelon. (1) Physical security should be a primary consideration. We ought to provide for rapidly erectable, strong fortifications, barriers, and bunkers. Projectile-proof mats and rigid composites, plus hollow forms to be loaded with soil on-site, using portable machinery, are indicated. (2) Shipping containers ought to double as shelters. Modified for habitability, containers of commercial-standard configuration could ease deployment and obviate much on-site construction. (3) For large shelters like hangers, rapidly erectable, transportable buildings, such as those made of composite materials--light metal skin bonded to cellular plastic core--should be used. One recent modular design using advanced materials posits erecting roofs over areas of up to 10,000 square feet by two men in one day, at a cost of \$6.00 per square foot, compared with a cost of \$18/sq.ft. using traditional construction and employing much larger crews. (For comparison, a standard canvas tent of 200 sq.ft. costs \$5.00/sq.ft.). (4) Tested, approved designs for shelters of indigenous materials, for rapid construction by local contractors, should also be available.

c. Unit Security Requires New Doctrine and Materiel

In many situations, the forward echelon will find itself secured by host nation guards and operating amid the comings and goings of indigenous employees, curious visitors, children, and domestic animals of all descriptions. In such circumstances, the U.S. commander will find the pistols, rifles, and machine guns his unit was issued for local security all but useless. Real military threats he may have, but his security problems will also include saboteurs, terrorists, thieves, prostitutes, and drug peddlers. In most cases, he will not be able to rely on use of deadly force. Low intensity conflict requires new security concepts and new materiel. One proposal of merit--an adaptation of a demonstrated technology--would require all personnel authorized in or near the unit's vital areas to carry coded identity tags that could be remotely and continuously interrogated. This would give the commander 24 hour-per-day accountability for all U.S. personnel and foreigners with authorized access. His outer security would rest less on perimeter fences than on sensors capable of detecting any unauthorized intruder within his security zone and of providing close-up visual inspection, coupled with means for deterring whomever or whatever the intruder may be.

2. Basing Forces at Sea

Most areas of the Third World where U.S. forces are likely to be deployed for low intensity conflict missions are accessible by sea and can be supported from sea-based platforms. Sea-based options can also ameliorate many of the political, economic, and security problems associated with stationing U.S. forces in a Third World country or even exercising transient rights there. Operating in international waters or in a nation's territorial sea, but outside the view of the population, U.S. sea-based units would be politically, economically, and culturally less intrusive. Sea-based platforms would also be inherently more secure than land bases from attacks by saboteurs, terrorists, paramilitary criminals, or guerrillas. (But, as Iranian guerrilla-launch attacks and minings make evident, naval combatants might have to be deployed to secure unarmed, or lightly armed platforms.) Sea-based options can also significantly reduce the time and money required to establish a secure operating area overseas, because we can prepare for such operations in advance and deploy platforms only when the situation requires. Lastly, sea-based assets are fully recoverable. When the requirement for U.S. presence is over, our investment can be removed and used again elsewhere.

One option the United States could pursue would be to augment the U.S. Navy and the U.S. Marine Corps with additional amphibious and fleet mobile logistics ships and to strengthen their ability to sustain forces at sea with minimal dependence on forward bases for long periods of time. Such an option would provide the United States with an extensive capability to operate with severely limited overseas base structures.

Another option would be to look for cost-effective technological alternatives developed expressly to support U.S. air and land operations in Third World regions where U.S. strategic interests are engaged. The design objective should be modular basing configurations adaptable to the requirements of any of the armed forces. Components of the basing scheme could be resized or replaced, so that any "base" could be task-organized or tailored to meet requirements that may vary over place and time. For example, the mix of modules in support of a government actively fighting an insurgency might differ from that in support of a government trying to prevent insurgency by providing medical services or building farm-to-market roads.

There are five promising concepts for enhancing ability to use basing at sea. The first, commonly known as the ARAPAHO system, requires configuring a specific type Army unit, for example a helicopter maintenance unit, to fit into shelters identical in shape to standard shipping containers. These could then readily be deployed on chartered,

container-carrying merchant ships. The unit is self-sufficient within its containers; it can perform its mission wholly from them, whether on ship or shore, without external power or plumbing. A second concept, Deployable Waterfront Facilities (DWFs), is under investigation by the U.S. Navy for a variety of peacetime and contingency situations for berthing, cargo throughput, and other support for maritime forces. The third concept, studied in depth by the Navy a decade or so ago, is a modularly assembled, island-size base on a floating ocean-going platform. The fourth, also studied years ago but never acted upon, is a "super ship", a huge mobile airfield-at-sea capable of supporting operations of the largest U.S. aircraft. A fifth calls for very fast ships, enabling very rapid transit into the Third World from established bases in CONUS or elsewhere.

a. ARAPAHO

The U.S. Navy developed the original ARAPAHO concept to provide convoy protection using a commercial container ship as an antisubmarine warfare helicopter flight deck. The U.S. Army has recently reexamined ARAPAHO as a means of deploying an Aviation Intermediate Maintenance (AVIM) unit to a foreign operating area. The ARAPAHO/AVIM, configured in modules that conform to International Standard Organization (ISO) container dimensions to facilitate deployability to the port, can be loaded aboard a wide range of commercial container ships within less than a day. The AVIM can perform its mission aboard the ship without modifying the ship itself. Design requirements include a flight deck capable of simultaneous landing of 2 CH-47D helicopters; hanger facility for maintaining 4 UH-60 helicopters simultaneously; space to transport 8 UH-60s; crew facilities for up to 300 personnel (messing, berthing, recreation, sanitation, laundry, and medical); and office, work, and storage spaces sufficient to support 45 days of operations without resupply. The AVIM could function from the ship with only a small contact team ashore--less than a dozen personnel.

Because of its match with the concept of echelonment, discussed above, ARAPAHO should be expanded as an Army and Air Force supplement to U.S. Navy and Marine Corps capabilities and as an alternative to overseas basing for U.S. operations in support of Third World conflict. The U.S. Air Force and the U.S. Army should reconfigure certain Combat Support (CS) and Combat Service Support (CSS) units for operations from ISO-compatible shelters, with priority for intelligence, communications, transportation, engineering, and medical units. A first approximation of the numbers and types of units to be made container-compatible would be those CS/CSS units now based in Panama plus those that have been deployed from CONUS to USSOUTHCOM over the

past few years. A mix of these container-compatible units could then be deployed on board leased commercial ships for given missions. When not deployed, the units could train or operate from the containers, perhaps obviating some construction, and eliminating need for some issue tentage and organic prime-movers. That posture seems particularly well-suited to Reserve Component CSS units. For both Active and Reserve units, the configuration would be conducive to readiness for quick deployment via truck to a port.

b. Deployable Waterfront Facilities

The Navy designs Deployable Waterfront Facilities (DWFs) as floating modules for use as piers, quaywalls, or associated facilities during peacetime. During a contingency operation, the DWF modules would be transported by heavy-lift, semi-submersible ships or towed to the Objective Area and quickly converted to an operational port facility for cargo offload and other logistics operations.

The DWF concept should also be pursued as an alternative to overseas basing for low intensity conflict. The DWF concept is especially attractive when combined with ARAPAHO-like units operating from containers. A likely scenario for future U.S. support to a foreign government threatened by an insurgency could include the deployment of a mix of intelligence, communications, logistics, and other modules on board a leased container ship. If, after operating in the area, conditions indicate that a long-term support effort is required, and the ship's mobility is not essential, a DWF could be established using the containers that had been on the ship. The DWF can incorporate off-shore oil rig technologies and/or use very large barges, which carry loads equivalent to those of a standard container ship. Such barges could also be configured with a flight deck for helicopter or VSTOL/STOL operations.

The DWFs are very similar to commercial structures now widely available at low prices because of their disuse within the petroleum exploration and extraction industry. Such structures have been successfully employed in the North Sea and other hostile natural environments, and proven techniques are available for building habitable platforms for virtually any conceivable military purpose, moving them to the site of use, and maintaining them on site.

c. Mobile Platforms as Air Bases

A significant amount of engineering effort has been expended by the U.S. Navy on designing and testing plans to build very large, sea-worthy platforms. Consisting of four or more decks arrayed some 50 or more feet above the ocean surface atop long, pillar-like

buoys, built in sections 300 feet square, these modules would be locked together at sea to form a surface capable of supporting landing or take-off by large fixed-wing aircraft. At the same time, this huge platform would have the capacity to perform major ship repair and replenishment, staging and transloading of units, and storage and C³I missions. Such islands would be self-propelled and would maintain a few knots headway to accommodate currents and wind. The engineers believe these platforms to be very robust in any sea-state, and virtually invulnerable to destruction by any weapon system except a nuclear weapon.

d. Superships

Another promising Navy design involves three large catamaran ships--double-hulled vessels that might be built by bridging across two of today's readily-available supertankers. Each would be capable of independent operations at speeds of 18 knots, and could rendezvous at sea to linkup end-to-end with the other two to form a supership, its deck a 5,100-foot landing field. The hulls could contain huge amounts of equipment and supplies, so that one set could hold all the U.S. materiel prepositioned at Diego Garcia. In fact, one such supership could perform almost all the functions now provided by the base at Diego Garcia, with added advantages of mobility and freedom from political overburden.

e. Advanced cargo ships

The U.S. Navy and commercial naval architects have examined various schemes for building very fast cargo vessels. These requirements for have arisen from the need established by NATO's Supreme Allied Commander Europe (SACEUR) for early arrival and sustainment of forces from U.S. strategic reserve in CONUS. But such ships could also alleviate the need for establishing and maintaining stocks of materiel at temporary bases in the Third World by moving goods rapidly from established bases in the contiguous United States, or elsewhere. Five general types of advanced ship designs have been investigated: (1) powered lift hulls, such as the air-cushioned vehicle (an example is the Soviet POMORNIK-Class air cushion landing craft, with a hull 57 meters in length and 350 tons displacement); (2) hydro-dynamic lifted hulls, such as the hydrofoil; (3) surface effect ships (SES), designs that rely on trapping air beneath the hull; (4) aerodynamic lift hulls, essentially wing-in-ground-effect (WIG) aircraft designed for over-water operation (of which the largest known is the Soviet "Caspian Sea monster"); and (5) buoyant lift designs, such as the Small Water Plane Area Twin Hull (SWATH) design, a catamaran-like platform that derives buoyancy from submerged cylindrical hulls. As heavy lift cargo

ships, only the SES and the WIG are attractive. The following table compares data--expressed in maximum values--for proposed U.S. SES and WIG designs with the existing USAF C5A transport and SL-7 fast cargo ships, using for illustration the Suez route to Southwest Asia:

	<u>Load in thousands of lbs.</u>	<u>Range in nm.</u>	<u>Speed in kts.</u>	<u>Refuels to SWA</u>
C5A	250	2500	400	3
SL-7	45800	12200	33	-
SES	11200	3500	51	3
WIG	750	5600	250	1

Up to now, the U.S. government has not acted on WIG development primarily because of anticipated difficulties in providing a base for loading and unloading the vessel at either end of its transits and in refueling it on intercontinental missions. Conceivably, however, a WIG used in conjunction with a mobile platform or a supership on one end of its flight and a DWF structure at the other might offer important advantages as a means of moving large amounts of supplies expeditiously from the base at sea to a Third World country of interest.

Similarly, we have not acted to build an SES because of its anticipated inordinate fuel consumption. Reportedly, however, the Japanese have had in development since 1979 a ship propulsion system centered on an advanced electric motor with a super-conductive stator. Recently, the Japanese firm Sumitomo announced that it intends to build a 50-knot container ship with a special hull design exploiting this propulsion system with which it expects to compete successfully with air freight between the United States and Japan by assuring 100-hour trans-Pacific crossings for ISO containers.

3. Long-Endurance, Air-Breathing Aircraft

One important function of overseas bases is to support U.S. air operations. For low intensity conflict, airlift and intelligence collection are the most important. While space-based platforms have redoubtable capabilities for the latter, they can not yet substitute for air-breathing collectors in all respects, and are not relevant for hauling freight or passengers. Sometimes, but not always in low intensity conflict, airlift operations can be conducted through commercial facilities or through the air bases of allies and friends, as routine undertakings. Some airlift operations, however, especially those in support of

Special Operations Forces or Special Activities, might better be conducted direct from U.S. bases, with minimum requirements for access to foreign bases enroute. And virtually all intelligence collectors prefer to operate from U.S. bases.

This suggests aircraft of greater range and endurance than that of the present fleet. It also suggests that the Services should readdress those inter-Service agreements that led to dividing collection between the U.S. Air Force and the U.S. Army. Today, some of the signals intelligence systems most valuable in low intensity conflict are available only on short-range, limited-endurance Army aircraft. For low intensity conflict, the United States will often require, as it has to date, very long-legged intelligence collectors.

There are several technologies promising long-endurance, atmospheric platforms that should be pursued. As with sea-based platforms, these platforms would not require an extensive base support structure in or near a country of interest. Overflight rights would be granted, as necessary, by the supported country.

Continuous, wide-area surveillance is one of the most important capabilities that the United States could bring to bear in a low intensity conflict. Surveillance requirements would cover a wide spectrum from active radar detection and tracking of ship and aircraft movements, to locations of guerrilla units or drug processing centers, to intercepting communications and electronic emissions. In all these cases, the critical surveillance capability is the length of time that continuous coverage can be sustained. When continuous coverage does not exist, targeted activities can be altered and phased to take place during uncovered periods. Today's surveillance platforms (aircraft, UAV, satellites) provide only sporadic coverage, and their presence "on station" is either predictable or detectable. Additionally, manned fixed-wing aircraft, both current and future, require substantial land- or carrier-based support and infrastructure.

There are two developmental programs, airships and robotic aircraft, that could provide long-endurance, atmospheric platforms, which would require overflight permission, but little or no support in the targeted nation.

a. Airships

Airships have had a long and colorful history. They include Germany's high altitude (20,000 ft.) bombing of London during World War I, and the U.S. Navy's airship operations providing fleet antisubmarine protection all over the world during World War II. An airship incorporating modern technology could provide a critically needed long-endurance surveillance platform to support U.S. interests in any region of the world. As

envisioned, airships would be operated independently of Third World bases, either in international airspace or in national airspace with the consent and protection of the supported country. Each would carry multiple surveillance sensors linked to communication networks in contact with U.S. and allied national and regional command centers, a full crew for 24 hours per day operations, and a propulsion system capable of unrefueled operations in excess of 30 days. The crew could be resupplied and rotated via helicopter. The surveillance sensors would include large aperture radars capable of detecting and tracking multiple small targets on land or water, surface and airborne at extended ranges. Other advanced sensors installed within its huge volume, or upon the airship's large surface area (over 430 feet in length and 90 feet in height), would provide a high-potential intelligence gathering capability. Even with internal combustion engines, by recycling and cooling the exhaust, the airship could be designed with virtually no heat signature, making it a difficult target for heat-seeking missiles. And an airship could make excellent use of technological advances in photo-voltaic cells and high-temperature superconductors for a high-altitude solar-regenerating electric propulsion system.

A likely scenario would be to deploy the surveillance airship at 10,000 feet or higher over the supported country, or off its coast in international waters and airspace. From this position, large areas could be continuously monitored by electronic and electro-optical sensors to develop and maintain an almost complete data base on normal activities within the targeted area. Any changes to those normal traffic patterns, when fused with other information, would provide invaluable intelligence that could be passed to appropriate command centers, U.S. or allied, on a near real time basis.

The Navy has been engaged in the prototype development of a mid-size, non-rigid airship. The key Navy missions (threat target early warning, surface surveillance, and communications relay) are all required on a continuous basis and are directed toward operations in support of and in conjunction with fleet battle forces. Navy studies have shown that an airship is the only manned platform capable of carrying the multiple sensors required while remaining airborne for extended periods.

Recently Navy, Air Force, and Department of Defense Science Boards have independently concluded that airships (lighter-than-air technology) have the potential to be the most, and possibly only, cost-effective platform to provide sustainable, continuous airborne surveillance. Mission needs range from CONUS defense against Soviet nuclear cruise missiles, to battle force defense, to border surveillance of potential drug traffickers and local drug interdiction roles.

Another recent study for the Defense Advanced Research Agency identified an airship design as a potential logistical vehicle, being capable of carrying over 100,000 lbs. over ranges of more than 1,500 nm. at speeds up to 90 kts. Such an airlifter would be particularly useful in the Third World because it would require neither a prepared base at its point of delivery, nor materiel handling equipment for off-loading, being virtually autonomous. Again, such a design used in conjunction with a mobile platform-type base at sea, or a supership, could eliminate vulnerabilities and bottlenecks frequently encountered in developing countries with austere cargo-handling infrastructure.

An airship could be designed for integration with a family of Unmanned Air Vehicles (UAVs), known also as Remotely Piloted Vehicles (RPVs). These robot aircraft could cooperate with the airship for close, discriminating sensor-work close to the surface, and for extending the range of the airship's sensors. They could even provide it with stand-off offensive and defensive weapons capability. Airships could in effect be designed to serve as motherships for the UAVs: conducting the launch, control, and recovery of the UAVs within the airship itself. This was successfully demonstrated years ago when bi-planes were launched from and recovered aboard U.S. Navy airships.

Consideration should also be given to integrating offensive and defensive weapons systems on the airship. Air-to-air missiles, very precise air-to-surface missiles, and electro-magnetic guns are likely candidates.

Another promising use for an airship is as a test platform for prototype sensors. The airship could offer a vibration-free, laboratory-like environment for test and evaluation of developmental systems.

b. Unmanned Air Vehicles

Pilotless aircraft of sufficient range could ease requirements for overseas bases. The theoretical cost-effectiveness of robotic aircraft for missions in which manned aircraft would be exposed to unacceptable risk has been clear for several decades. Unfortunately, the practical difficulties of developing robotic aircraft that are functional, reliable, and affordable have proved to be greater than their proponents had expected. However, between now and the first decade of the next century, successful, cost-effective unmanned aerial vehicles will almost certainly become available.

It appears possible to build unmanned aircraft that can be controlled over intercontinental distances. For instance, were it desirable to use a given class of sensors aboard a relatively low-altitude UAV for surveillance of a Third World hinterland, the

mission could be undertaken from an off-shore ship, which would serve as the launch and recovery site, but which would control the UAV only during the beginning and end of its flight. The remainder of the mission would be executed under control exerted through a satellite, so that the collected information could be channeled direct into a CONUS facility where other intelligence collectors were also terminated, and all-source interpretation and cross-cueing could be effected.

A variant of this scheme would have the flight control exercised by a long-endurance aircraft or airship, and the sensor data stream fed back to the CONUS all-source intelligence center by satellite.

An advantage of the satellite in the loop would be flexibility of intelligence dissemination, command, and control, because ground stations could be provided to the U.S. Country Team, to the host government, and to any security force designated by the latter to act on the intelligence.

4. Space Platforms

Space programs of the United States have heretofore aimed at versatile, very durable, long-lived satellites. These performers have also been very expensive, large, and heavy, requiring large booster power to attain orbit. Now there is a new class of light satellites (LIGHTSATs), which would be much cheaper, smaller, and put into orbit without a heavy booster, but somewhat less mission-capable and long-lived. One characteristic of these LIGHTSATs especially attractive for low intensity conflict is low-cost, transportable ground stations. The Commission on Integrated Long-Term Strategy has endorsed these as a way to decrease the redundancy and improve the robustness of U.S. space systems against the prospect of war in space.

Such satellites would also be an important support for the strategy of selective involvement in Third World conflict, because they could readily provide what most nations we might wish to support require most: better intelligence and secure communications for disseminating it. For example, our providing LIGHTSAT coverage and ground stations to the government of Colombia would dramatically upgrade their capability against their narco-trafficking enemies, assuring secure communications, and permitting remote reading or unattended sensors. As discussed above, the satellites might be used to control UAVs, and under certain circumstances, control could actually be passed to a Colombian official.

F. IMPROVE AID FOR FREEDOM FIGHTERS

Some covert operations have been controversial; others have been widely supported by the Congress, the American public, and U.S. allies. The United States has successfully conducted covert operations that remained secret as long as necessary. Typically, these were (1) small in scale, (2) of limited duration, and (3) marked by the absence of U.S. citizens or other evidence of U.S. involvement. But certain covert operations, particularly those using highly complex and sensitive equipment, could only be conducted by U.S. personnel. Many such operations had to be carried out over long periods of time, and many conducted in conjunction with, or as part of legitimate, overt U.S. government activity. Most were conducted with the knowledge of friendly governments.

In selected instances, where U.S. national interests and objectives would clearly be served and where U.S. support would favorably affect outcomes, the United States should help resistance forces opposing regimes that are hostile to U.S. interests. The case for doing so is most compelling when the resistance movement has launched an insurgency against a government engaged in aggression against its neighbors, or when they are defending their homeland against a foreign invader.

Supporting a Third World resistance movement requires Congressional support, persistence, and sound planning. Often such a movement will be factionalized, its leaders divided against each other. Most members are likely to be ill-trained, and many of the leaders primitive strategists, inept tacticians, and poor logisticians. They almost certainly will need help with intelligence and strategic planning and with tactics, communications, and informational programs. They will need special kinds of equipment, often materiel not available to the U.S. armed services. Development and procurement of their equipment have to be expeditious, but deserve the same careful attention to exploiting advanced U.S. technology as we would give to that for our own use.

If the United States' assistance for such movements is large and continuing, it is virtually certain to become the object of media interest and to become public knowledge. Such publicity will probably not be welcomed by a regional government that is also involved with supporting the freedom fighters (for example, by providing bases to them). Such a government, out of concern for its own domestic politics or for fear of retributive attack, tends to prefer that the United States not acknowledge its role officially. It is for this reason that Congress authorized the President to carry out U.S. support, in specific cases, not as openly acknowledged security assistance, but as a "special activity", in which case the U.S. government can maintain official silence.

The U.S. laws governing special activities provide the President considerable flexibility. He may assign the responsibility for execution to any competent agency; he may assign the task of supporting freedom fighters, for example, to a military command, under the cognizance of the regional Commander-in-Chief. Putting a CINC in overall charge could have advantages if the support operation entails lengthy, diverse military training and logistical activities, or if its scope is such that it could affect the military situation in several countries of a region.

In any event, the issue is not whether the operation could be kept out of the news--it is unlikely that the press would remain silent for long--or whether the CIA should be involved--its officers would inevitably contribute. It is a matter of drawing upon the appropriate resources. The President has the option of directing any Government department or agency to manage such an operation, and he could so direct the Department of Defense or the Department of State. The operation would not necessarily have to be kept secret in all its aspects, any more than other military operations, which routinely involve both open and classified activities. Given Congressional understanding and support, any problems of organization or oversight within the U.S. government could readily be resolved.

G. ASSURE TACTICAL INTELLIGENCE

The strategic cornerstone for regional conflict in the Third World is intelligence--the U.S. ability to collect, analyze, and disseminate information that enables U.S. planners to anticipate not only threatened violence, but also political and economic trends with long-term portents of violence, to devise effective counters, and to assure discriminate responses by allies or our own forces. As a direct function of U.S. technological leads in sensors, platforms, and advanced means of interpretation and dissemination, intelligence is at present the greatest comparative advantage of the United States in the Third World, and probably will remain so for the foreseeable future.

Robert Gates, the Deputy Director of Central Intelligence, has stated publicly that:

We must, as a country, give priority to learning more about the developments in the Third World and to providing early warning of economic, social, and political problems that foreshadow instability and opportunities for exploitation by the U.S.S.R. or its clients.

Such successes as the United States has enjoyed in forestalling terrorist acts abroad or in dealing with insurgency, either through a friend or ally or on its own, must be attributed, in large measure, to U.S. intelligence--information collected or corroborated

through the various methods employed by our intelligence community and correlated with existing data and analyses; the whole assessed by experts; and facts and judgments disseminated to those who need to know for diplomatic, operational, or planning purposes. The key presidential decisions concerning any U.S. response to low intensity conflict--whether it is in the U.S. interest to act, and if so when and how--depend crucially upon the cogency of his intelligence. Moreover, should the President decide to act, the adequacy of U.S. intelligence will influence, often crucially, how much support he will be able to muster among leaders of American opinion, members of Congress, the public, or allies and friends abroad for his initial commitments and for continuing understanding and support in a protracted struggle.

Two different kinds of U.S. intelligence are required: **strategic** intelligence and **tactical** intelligence. The former provides early warning of impending threats and enables reappraisals of American policy in the context of all our interests, worldwide; the U.S. intelligence community should be able to provide strategic intelligence from its day-to-day posture. Tactical intelligence usually requires either additional or reallocated collection activities focused on a specific threat to illuminate principal actors, their operational methods and means, their capabilities, and their plans. The first step the United States should take after deciding upon any serious commitment entailing a sustained national effort in the Third World is to step up production of tactical intelligence. The extent of effort devoted thereto should be proportionate to the political, economic, or military risks assumed by the President. This effort must enlist the U.S. intelligence resources available to the U.S. Country Team in any nation of interest, the regional CINC, and the national collectors that normally concentrate on strategic intelligence. In addition, the Secretary of Defense will have to approve diversion of military collection systems from other missions--aircraft, ships, computers, communications equipment, personnel--and redirect analytical resources from other targets to exploit the resulting data in order to produce tactical intelligence products for the ambassador(s) and the CINC(s).

There are at least two fallacies that obtrude in understanding the foregoing arguments for the primacy of intelligence. The first is that tactical intelligence can be produced only by offensive combat operations--a kind of chicken-and-egg notion that foreknowledge of what the enemy is up to presupposes gaining and maintaining tactical initiative, a neat trick for any government in low intensity conflict. The second is that no intelligence worth gathering is likely to proceed from focusing U.S. technologically based collection, since the only reliable information for low intensity operations comes from human sources. This latter canard has delayed U.S. reaction to certain recent strategically

important situations, such as those in Central America; once undertaken, the collection of imagery and signals intelligence, together with an appropriate massing of interpretative talent, promptly produced new, tactically significant understanding. The point is that the quality of human intelligence is rarely high enough, and its quantity seldom so satisfactory, that added U.S. technological collection is superfluous. Moreover, the U.S. Country Team is rarely in a position to step up HUMINT, especially in a situation proceeding adversely for a supported government. Most important, U.S. tactical intelligence requirements extend to both friend and foe--that is, we must collect information on the total situation, for otherwise we cannot assess risk or detect vulnerabilities.

No plan for U.S. assistance to any Third World nation is likely to be effective without extensive, well-founded U.S. tactical intelligence. There is often not much the United States can learn by asking the beleaguered ally to share his intelligence; usually his plight results from inability to collect and analyze information concerning his adversaries, or from a defective view of the efficiency of his own government, its representatives, or its armed forces. Our aid might aim at ameliorating such deficiencies, but in both the short term and long term, U.S. tactical intelligence will be essential for quality assurance. Our appraisal of the completeness and timeliness of indigenous intelligence would compose one pillar of U.S. planning at any stage of our commitment. Other pillars would be U.S. intelligence estimates of the strengths and vulnerabilities of the threat, of the competence and probity of those we support, and of the efficacy of measures--political, economic, and informational, as well as military--through which the United States might seek to strengthen our friends and confound their enemies.

Congress is likely to support the collection of tactical intelligence, and will probably do so even if it may not agree with aspects of the President's policy overall. Congress itself needs sound analyses upon which to base its deliberations. Congress has seldom objected to intelligence collection (although it has restrained intelligence sharing). To the contrary, most members are supportive of better U.S. intelligence, and even those who oppose U.S. involvement in Third World conflicts are tolerant of efforts to inform ourselves better concerning the realities of situations confronting us there.

The U.S. experience with tactical intelligence in El Salvador, 1980-1985, is instructive. At the outset, President Reagan's administration faced daunting obstacles in seeking to shore up the caretaker government there against a determined, growing threat from leftist guerrillas supported by the Sandinistas and Cubans from Nicaragua. Most American leaders saw the violence as a local matter, accepted the view that the Salvadoran government was beyond help, and expected the Salvadoran officers running the

government to go the way of Somosa. The American public, to the extent it was even aware of El Salvador, opposed involvement. Congress reflected these opinions and doled out security assistance and other forms of aid in dribbles, frequently hamstringing efforts by the U.S. Country Team to help the Salvadorans develop long-range plans for countering the insurgency. In 4 years, the situation was transformed. By 1985, there was a constitutional government in place, with a popular president elected under dramatic circumstances. There was support within the U.S. Congress for broad, multiyear assistance to defend that democracy.

The major gain for Salvadoran military operations between 1980 and 1985 was in tactical intelligence. Provisions for tactical intelligence were made beginning as early as 1981, and by 1983 it was being collected in quantity by the Country Team and by the U.S. Atlantic and Southern Commands, analyzed in Washington by a multiagency intelligence team, and disseminated to the Country Team and the two U.S. CINCs. That intelligence provided both a prod for Salvadoran political and military action, and assurance that the Salvadorans, when they acted, did so prudently. It furnished the Country Team and the CINCs important rationale for our entire aid program, helping to underwrite a significant shift of opinion in Congress in favor of aid. To be sure, there were other factors, such as the favorable impression formed by members of Congress of President Duarte after his meetings with them. Duarte used U.S. intelligence-based talking papers in those meetings. Classified intelligence estimates presented to the Congress in mid-1984 played an important role in convincing members on both sides of the aisle to support the Administration's policy.

Each low intensity conflict is a product of unique circumstances that frequently defy generalization. However, any President's ability to develop consensus among leaders of this country on the soundness of his policy, and to sustain their support, will depend upon the intelligence community's ability to provide him with well-reasoned and supported analyses at the outset of U.S. commitment and candid, critical reappraisals throughout its course, however protracted. Moreover, provisions for tactical intelligence should be an essential component of any decision to assume an active role in such conflict. Without it, appropriate security assistance measures will be difficult to determine. Other plans and operations will also be impaired. We will be unable to help our friends identify and repair their weaknesses, or detect and attack the vulnerabilities of their foes. We will have scant leverage to persuade them to do what we think is necessary, and no oversight on the

implementation of our combined programs. Informational efforts at home or abroad will be handicapped. Five requirements for tactical intelligence are salient:

- Ability to store, sort, retrieve and collate large amounts of precise information concerning personalities, organizations, locus, time, and activity.
- Ability to maintain surveillance over large areas day or night, regardless of weather or terrain.
 - For rural insurgency [classic guerrilla warfare by organized bands using terrain and vegetation to conceal their base of operations] this implies not only adroit use of human intelligence, but broad use of imagery, electronic intelligence, unattended sensors of various types, and unobtrusive collection platforms.
 - For urban terrorism or insurgency [conspiratorial paramilitary groups, often clandestine, which operate in cities and towns] this implies hyper-efficient, police-type intelligence: large-scale data collection by human and electronic means, sifted often for indications of presence and warning of attack.
- Ability in-theater to perform all-source management, including tasking of collectors, first-order interpretation of results, and timely cross-cueing of other collectors.
- Ability to exploit, minute-by-minute, the well-heads of national intelligence in Washington, D.C., as well as theater intelligence, utilizing any combination of unconventional organizations or communications that is responsive to the needs of the CINC and the Country Teams supported.
- Ability to produce intelligence understandable by lay persons for use in informational programs.

These intelligence requirements will require enhanced communications architectures and networks for dissemination. Additional secure telephone lines and satellite channels may be required for a Country Team engaged in supporting a country fighting an insurgency. The rapid transmission of imagery is often the most effective for linking the various actors, both U.S. and foreign. New technologies in interactive image communications are available to support such communications.

H. BUILD NEW DEFENSES AGAINST TERRORISM

To defend against the depredations of terrorists and saboteurs, the United States requires both improved intelligence for preemption and counteraction, and better physical defenses for particularly vulnerable public-use facilities. Whether for our own purposes, or for helping a friend or ally abroad, we need to bring all our ingenuity to bear on anticipating, deterring, preempting, or foiling such enemies.

The Working Group has studied the reports of the Vice President's Task Force on Combatting Terrorism, headed by Commissioner Holloway. It has consulted with experts on terrorism and sabotage, intelligence community personnel charged with collecting relevant intelligence, and state and regional officials responsible for security against terrorists or saboteurs. We are favorably impressed with the progress evident within the intelligence community in collecting, analyzing, and disseminating information concerning threats, but we note, as did they, that overseas the scope of the problem is increasing at an alarming rate, and, over the longer term, our ability to warn of impending terror or sabotage here may prove inadequate.

Effective offensive countermeasures against sabotage and terror depend in the first instance upon intelligence, so that appropriate U.S. and foreign security forces can be forewarned. We believe that defensive countermeasures are necessary. The record of terrorism to date supports the conclusion that some classes of targets are more vulnerable to sabotage or terrorist action than others--for example, the international air transport system. Technology is in hand or in sight that, over the next decade, would permit selective hardening of key facilities without detracting from their public utility, and without necessitating new Federal funding programs. Each of these concepts is explored below:

1. Improved Intelligence for Preemption

Vulnerability to sabotage and terrorism can be reduced by increasing the sharing of intelligence and improving operational cooperation among city, state, regional, and Federal law enforcement agencies. Because of the development of communications and transportation systems during the last 20 years, many state and local law enforcement organizations have established effective regional support arrangements. Along the U.S. border, liaison between these and Federal agencies seems to have improved as the Administration's attempts to counter drug smuggling have intensified. Elsewhere, local officials report that their interface with Federal counterparts is less than satisfactory. The Federal government needs to participate in enhancing communications interchange all around the country.

The need for better assured and more pervasive cooperation in intelligence sharing, training, and operational coordination among U.S. law enforcement agencies will increase in the future, and we need to study now the technological means of sharing information among the intelligence and law enforcement communities. We can expect the threat of imported violence to continue to mount as intercontinental communications become more

readily available, travel times decrease, and the destructiveness of terrorist weapons increases. A sound model for the requisite secure communications, information processing capability, and operational decision aids is the computer-based communications network maintained by the FBI among its six regional headquarters.

2. Better Defenses for Prime Terrorist or Sabotage Targets

There can be little doubt that the use of violence by terrorists will continue through the turn of the century and beyond, that new and more destructive weaponry is now available to terrorists, and that state sponsors of terrorism include nations that have demonstrated a willingness to use even proscribed weapons like toxic chemical agents. While the report of The Vice-President's Task Force on Combatting Terrorism has been proven valuable in establishing programs to counter the threat of terrorism in the near term, it did not address longer range strategies, such as hardening of selected high-value targets as a passive means of significantly reducing vulnerability and improving deterrence.

While it is clear that making some facilities more difficult to attack will only precipitate a reordering of terrorists' objectives, some classes of facilities are, on the record, much more conducive to purposes of saboteurs or terrorists than others, and the United States is peculiarly vulnerable. Among prime sabotage targets are U.S. power-transmission facilities, which often have no back-up equipment available to replace damaged materiel. Federal oversight bodies need to incorporate into their standards provisions for defenses against, and recovery from sabotage.

Americans as individuals are peculiarly vulnerable to terrorism at airports and on airliners. Worldwide, most of the terminals of the international air transport system are in a continual state of reconstruction dictated by expanding passenger volume, new types of aircraft, and novel forms of travel services. Large sums of money are spent annually on these upgrades, but almost no attention is paid in the designs to security measures or terrorist countermeasures. Little or nothing is being spent in the United States to improve safeguards for passengers, baggage, or the aircraft themselves.

Yet, there is a significant body of technology that could be used to enhance the physical security of such vulnerable public facilities. For example, for air transport it appears possible to provide annular defenses, the core of which is the travel vehicle itself, comprising networked sensors and non-intrusive surveillance devices that could overwatch activity within the entire facility, and even on avenues of approach to it, scanning

continuously for weapons, explosives, contraband, and individuals whose behavior warrants closer inspection. Identification tags--badges or temporary passes, both with embedded signature elements capable of being remotely sensed--could be used to control access to critical gateways (e.g., preboarding lounges or aircraft parking ramps). The same technology could be embedded in license plates on registered vehicles (e.g., protection against car bombs), opening possibilities of both remote reading and recording of transit via millimeter microwave energy. Modern techniques of computer security suggest that relatively tamper-proof tags and license plates could be designed, reducing the possibility of counterfeiting or falsification. These could be supplemented by a mobile security force, provisions for the operations of which were incorporated into the construction of the facility.

There will be added costs for such measures; but including this new technology in new construction incrementally would help reduce these costs significantly. Further, U.S. airline passengers now pay a tax on each air fare designed to purchase heightened security, and these funds have not always been used to that end. If the new defenses were effective in averting even one serious instance of international terrorism, their value could be better assessed.

There is a need to inculcate today's architects of public facilities with sound principles of security design. Security can be incorporated into almost any kind of structure with minimal impact on esthetics or function. Provisions for surveillance and security force reaction, secure areas, access control, blast containment, reduction of hazards from direct fire and fragments, and similar considerations should be dealt with as a matter of course in the plans of major public facilities. A first step would be legislation requiring that, in the future, the design of any structure to be subsidized by, or to be certified for public use by any Federal agency, be reviewed for compliance with specified security standards. The additional costs of such security design and review, which would not be much, could almost certainly be off-set by savings on hazard and liability insurance or paid for by user taxes.

I. SUPPRESS ILLEGAL DRUG TRAFFICKING AT THE SOURCE

Drug abuse in the United States is a problem of critical importance for our society. Most illegal drugs bought by Americans come from abroad, and American consumers provide more of the money that underwrites illicit drug production, processing, and trafficking worldwide than any other nationality. Our societal flaw is an international

scourge. Measures adopted here in the United States to deal with domestic demand, however warranted, should go hand in hand with measures to deal internationally with supply. Increasingly, all nations have a stake in finding ways to apprehend narcotraffickers.

International trafficking in illegal drugs--natural narcotics such as cocaine, heroin or marijuana or man-made psychotropic compounds, the designer drugs--has now become a threat to the security of the United States, and a menace to democracy and the rule of law throughout the world. Latest U.S. government assessments indicate increased production and consumption worldwide, with marked increases in drug abuse in some large Third World countries, such as India and Brazil, which are likely to figure ever more prominently in future international relations.

1. Narcotrafficking as a Threat to U.S. National Security

Illegal drugs smuggled into the United States from the Caribbean Basin and South America account for more than half such substances bought by Americans, and pose a particular threat to the national security of this country for the following fundamental reasons:

First, present and foreseen consumption of drugs will subvert millions of Americans from productive pursuits and channel enormous amounts of money into the hands of foreign criminals, some self-declared enemies of this country. Credible estimates of the aggregate annual financial impact of U.S. drug consumption--taking into account lost productivity, clinical costs, public information campaigns, and expenditures within the law enforcement, court, and penal systems, as well as efforts abroad to interdict smugglers and to eradicate the plants--approximate expenditures each year for national defense.

Second, the Latin American criminal cartels constitute an international underworld so extensive, wealthy and powerful that it can literally buy governments and destabilize entire societies. This underworld, specialized as it is for the smuggling of narcotic and psychotropic substances, and for the movement of large amounts of money--often large sums in high-denomination American greenbacks--has lent itself to the pursuits of those engaged in the illicit movement of arms and munitions, of terrorists and saboteurs, of spies, insurgents, and subversives. While the interests of the narcotic traffickers are not always identical to these others, the prevalence of their cooperation reflects their common outlaw status and their common interest in ineffectual government in any democratic

country. They naturally form symbiotic relationships with guerrillas or other insurgents, terrorists, saboteurs, and subversives.

Third, drug trafficking constitutes a clear and present danger to the very survival of democracy in certain countries long friends and allies of the United States. There are many countries so imperiled, but none is more threatened than Colombia, a democracy particularly deserving of our national understanding and support. America's drug habit has brought to Colombia political chaos, social upheaval, and pervasive fear. Colombia's system of justice has been directly attacked and severely impaired by assassins and guerrillas acting for the narcotic traffickers.

Drug trafficking has already diverted the U.S. armed forces from their traditional security missions, not only because they have to devote manpower and money to drug abuse prevention, detection, and rehabilitation, but also because they have had to assign operational elements to support law enforcement agencies engaged in interdicting drug smugglers. (Usually these have been penny-packets of aircraft and equipment, rather than whole units, so that the assignment has been disruptive of unit readiness.) Within the national security establishment, drug abuse often affects issuance of security clearances. In at least one instance, exploitation of a cocaine trafficker by foreign agents led to the loss of some of the most sensitive U.S. defense information, and drug abuse by anyone with access to such information constitutes an internal security vulnerability.

Conditions have deteriorated since 1983. The problem has grown despite extensive efforts on the part of the United States government to encourage foreign governments to eradicate cannabis, coca, and opium poppies, and to promote alternative agriculture; despite interdiction efforts involving unprecedented cooperation among U.S. government agencies and with foreign governments; and despite some striking successes in law enforcement both here and abroad. As in any other arena of national strategy, if adversaries seem to have outwitted us, we ought to reexamine both our strategic ends and our strategic means.

2. The Plight of Colombia

Devising an effective U.S. strategy regarding Colombia presents a useful case in point. Colombia is a democracy in northwestern South America, mostly this side of the Equator, with both Atlantic and Pacific coasts, a backbone of high valleys amid the Andes Mountains, and an extensive jungle region in its southeast, part of the Amazon River valley. Few Americans recall that Colombia has a long record as a staunch ally of the

United States: it was the only Latin American nation that furnished troops to fight along side ours in Korea, and is today the only Latin member of the United Nations Command there. Few know that Colombian troops have been active as peacekeeping forces in the Mid East. Not many appreciate that between Colombian and American military professionals there is a mutual respect and understanding of long-standing such as exists in only a few other countries outside of NATO. Colombia has an admirable record of freedom from military intervention in politics, and in recent decades, despite adverse markets, has achieved economic growth, largely from exports of foodstuffs and minerals.

Most Americans recall Colombia only in terms of televised coffee advertisements, such as those which portray Juan Valdez, "peeking the coffee beans one by one when they are purrfectly ripe". The trouble is, for both Colombians and Americans, that the real Juan Valdezes long ago abandoned coffee-picking for coca and cannabis, agricultural employment that pays 10 to 20 times more. Colombian traffickers are responsible for most of the cocaine and marijuana smuggled into the United States. These criminals have organized themselves into elaborate conglomerates for the purpose of growing, harvesting, processing, transporting, selling, and repatriating the profits from cocaine and marijuana. Men like Pablo Escobar-Gaviria, the Ochoa brothers, (Jorge, Fabio, and Juan), Jaime Guillot-Lara, and Carlos Lehder Rivas formed large, ocean and continent-spanning, Mafia-like rings capable of very large, very complex undertakings, demanding significant discipline and tight management. They obviously are more dangerous than mere drug thugs.

They built coca-processing centers or laboratories in the roadless rain forests of Colombia's Caqueta and Amazona provinces, factory-like complexes capable of converting a mash of coca leaves--termed "paste"--into crystalline cocaine, in quantities of tons per week. To do so, they had to cut numerous air strips into the jungle and fly in virtually all of the processing wherewithall--generators and fuel, heaters and dryers, reagents like alcohol, sulfuric and hydrochloric acid, acetone, ammonia, potassium carbonate and potassium permanganate, kerosene, gasoline, and diethyl ether. Most of the coca paste was also flown in from Peru and Bolivia, converted into crystals of cocaine hydrochloride, and then flown out across the Caribbean or Central America to the United States. From coca leaf to smuggler-ready plastic bags of white powder, they effected a transformation that reduced weight and volume by three orders of magnitude, and paid better than \$5 in profits for each \$1 they invested in the process.

They extended their enterprise to retail as well as wholesale vending. The huge sums of money that flowed back to them from overseas were held outside formal economies. In time, the narcotraffickers became richer than the government, and, through bribery, extortion, and intimidation, in many respects better informed, and more politically powerful.

They paid attention to public relations. They promoted the idea that, since the drug trade stemmed ultimately from North American concupiscence and lawlessness, the matter was for the United States to resolve within its own borders. They depicted themselves as Colombian Robin Hoods, looting rich, drug-sotted gringos to help Colombia's poor. When the United States sought help from the Colombian government with plant eradication and extradition, their flacks inflamed xenophobic nationalism. When the Colombian congress passed laws aimed at curbing their power, some of them joined league with one or another of the five guerrilla movements within Colombia. One kingpin--Carlos Lehder Rivas, since extradited to the United States--appeared on Colombian television in a guerrilla encampment calling his countrymen to battle against the United States.

But the narcotraffickers fouled their own nest by selling cheap by-products of their international trade inside Colombia. By late 1983, drug abuse had become a national scandal: there was a wave of suicides in Bogota, and the drug-ridden campus of the National University was closed down. Chief among the products foisted on young Colombians was *basuco*, a reputed aphrodisiac made of tobacco or marijuana, soaked in coca paste, and often laced with toxic adulterants like lead compounds.

Spurred by public demands for action, the Colombian government began to strike out into the jungle after the laboratories. One successful raid in March 1984, on a nexus of 10 coca processing factories and 6 airfields in Caqueta, netted 8,500 kilograms of export-quality cocaine, the largest such seizure of record.

The narcotraffickers retaliated with terror. In February 1984, they murdered Eduardo Gonzalez of the Ministry of Justice, and in April 1984, assassinated the Minister of Justice himself, Rodrigo Lara Bonilla. Courageously, Colombia's President Betancur and his congress legislated new, more rigorous legal strictures against illegal drug trafficking, and ordered the Colombian armed forces into action against them. In May 1984, the traffickers met in Panama with Colombia's attorney general and offered to cease operations and to pay a substantial fee to the government in return for its guarantee of legal immunity. The President of Colombia rejected that offer and intensified the campaign

against the criminals. The traffickers responded by vowing to kill five Americans for every Colombian extradited to the United States, and condemning to death any Colombian who aided an extradition.

A bloody war has ensued. Murders per capita in Colombia have been 5 times more frequent than in the United States. Half of Colombia's supreme court justices, and more than two dozen other judges have been assassinated, as have the editor of the nation's second-largest newspaper and hundreds of police officers. The violence has also taken a toll of innocent bystanders and relatives of the victims. Many a judge's bench is empty because lawyers fear to accept appointment, and sitting judges come to know that to approve a U.S. extradition request is to sign their own death warrant. Recently the Colombian supreme court declared the United States-Colombia extradition treaty unconstitutional, but the narcotraffickers afterwards executed the attorney general to warn against attempts to bring them to justice in any court.

Colombia faces national ruin. The United States is complicit in its plight. Our response ought to include not only help to the government of Colombia, but also a strong effort to curtail consumption by our fellow citizens through every means at our disposal--public education, clinical rehabilitation, legal deterrent, and punitive actions. In 1985, President Reagan told President Betancur that the United States would not only help Colombia as it could, but also would "continue our efforts to take the customers away from the drugs, which must complement our efforts to take the drugs away from the customers." President Barco, no less courageous and deserving of U.S. support than his predecessor, needs renewed assurances and concrete U.S. action.

3. A Plan of Action

Colombia's crisis, like that in other drug-producing countries, argues for its government's producing a long-range national plan, in concert with the United States, in which each nation would contribute as best it could to producing intelligence delineating the locus and modus operandi of the narcotrafficking cartels and to maintaining in readiness elite forces capable of striking decisively to act on that intelligence. The bilateral plan

would have to be coordinated with other nations involved. Such a plan--for Colombia or any similar case--might have some or all of the following features:

a. Counterforce Targeting: Interdiction

In the supported nation, carefully screened and sequestered indigenous police and security forces would attack points of greatest narcotrafficker vulnerability, e.g., at the centers where coca, cannabis, and poppies are processed into cocaine, marijuana, or heroin respectively. Such centers can be pinpointed using technological means (a potential U.S. contribution), as well as informants (their contribution), and could be assaulted while active (by local forces). Moreover, most such centers are dependent upon air support; thus a strategy that also aimed at gaining and maintaining superiority over contiguous air space could inflict severe damage upon the narcotraffickers. Again, the U.S. could best aid with surveillance. Even short of air superiority, timely information about aerial comings and goings would enable early warning, and more responsive and effective interdiction efforts on the U.S. border.

Early warning of smuggling enables planning and executing legally sustainable arrests in the United States by U.S. law enforcement agencies. U.S. military concentration on providing such intelligence will probably be more cost-effective than increased efforts to interdict U.S. borders with extensive maritime or aerial dragnets. Law enforcement practitioners attest that successes in drug enforcement at the border come from tip-off, not from a sentry ship or aircraft that lucks upon a smuggler.

Per the foregoing sections of this paper, the United States could make available to the supported nation three substantive contributions: (1) a LIGHTSAT for secure communications and sensor readout, with direct downlinks to its decision-makers; (2) a netted-radar environment for establishing control over its airspace, again linked to one or more of its command centers; and (3) an at sea U.S. base, nearby in international waters, that would obviate the need for any U.S. military presence on its soil or for using U.S. bases located in a third country.

b. Countervalue Targeting: Narcofunding

The international money-flow associated with narcotrafficking, with its frequent instances of money-laundering to disguise the origins and purposes of the funds, may also present an exploitable vulnerability. Attacking drug production and distribution is in effect counterforce targeting; we should pursue countervalue targeting as well by attacking the end objective of the narcotraffickers--money. As with other strategic targeting problems,

the first requirement is for intelligence. Basic information about money flow in the drug trade is woefully lacking. For example, it is known that more than \$1 trillion changes hands each day via electronic fund transfers, and that the bulk of high-denomination U.S. currency is under foreign control. But U.S. law enforcement agencies have no more than an elementary idea of how much either electronic or cash transfers figure in illegal drug trafficking, or how such narcofunds are transported, laundered, or spent.

Tough strategic targeting problems have been solved before by centralized management of collection and analysis. The U.S. intelligence community should construct a dynamic model of narcofunding, in both its domestic and international environments, and train analysts to manipulate and update the model to discover avenues for further investigation and identify promising courses of action. Legal review and advice will be critical. The intelligence objectives would be fairly easy to meet within the existing legal and administrative framework of intelligence support for the Government's counterdrug program. But at some point, new administrative, legal, or international action on further controls may be indicated. Both at home and abroad, U.S. strategy should encompass countervalue targeting.

c. Preventive Action: Clampdown on Precursor Chemicals

The United States, together with other nations, needs to take aggressive action to stem the international flow of precursor chemicals--the reagents needed to process illicit drugs--shipped from the United States and other industrialized countries into the regions of origin for illegal drugs. Latin American traffickers import from the United States virtually all the chemicals they use in making cocaine and heroin--such as ether, acetone, toluene and acetic anhydride. In 1986, for example, countries to our south imported some 55,000 tons of ether, a principal reagent in cocaine processing. Compared with similar shipments in 1983, ether imports rose some 70 percent. Similar sharp increases have been noted for other precursors. While there are many legitimate industrial uses for these, the amounts involved seem vastly in excess of legitimate utility.

This is a case for U.S. leadership: our Government should set the example by establishing firm controls over the export of these dangerous chemicals. By requiring export licenses and other administrative controls--similar to those already used to curtail shipments of chemicals that might be used to make war gasses--the United States might make it more difficult for traffickers to divert these substances to their illegal pursuits, or might make it easier to use shipments for intelligence purposes. As important, we could

point to our actions when seeking to induce other governments to undertake similar controls, to limit entry of precursor chemicals to specific ports, and to monitor closely their domestic transportation and utilization.

To implement its role in such a combined strategy, the United States will need new foreign aid resources, authorities, and flexibilities. It will also need more effective materiel--hardware and software--both for its own use, and for provision to foreign partners. For years, U.S. agencies have been trying to meet such needs with off-the-shelf sensors, aerial platforms, communications equipment, computers, and computer programs, and neither the U.S. government's research and development community, nor American industry, have seriously been tasked to produce long-range answers to stated requirements for better means of command, communications, surveillance, or interdiction.

d. Demand Reduction: Action Within the United States

None of the measures we undertake overseas are likely to be effective unless there is a vigorous and successful effort to reduce American drug consumption. If we wish to elicit help from friends and allies, we must be able to prove that we can cut illegal drug purchases here, and we can not afford to slight an effective educational, clinical, or legal instrument to that end.

J. EXPLOIT U.S. TECHNOLOGY

In the Third World, no less than in Europe or the northwest Pacific region, the United States should seek to maximize its technological advantages. In some cases, technologies developed against the contingency of high intensity warfare with the U.S.S.R. will be directly applicable. For example, we will want very precise, very "smart" missiles capable of seeking targets unerringly and causing little or no collateral damage. Advanced technologies for command, control, communications, intelligence, and training will also offer us more effective ways to cope with low intensity conflict and to help Third World friends.

High technology is often irrelevant in the Third World. Nonetheless, technology is relative. Very basic U.S. medical technology made a major difference in saving lives in El Salvador. Teaching an ally how to manufacture field rations or how to make durable boots may be far more valuable contributions to the mobility of his forces than donating advanced aircraft.

Nonetheless, certain advanced technologies promise to be especially helpful in supporting tactical intelligence, which is the strategic cornerstone for low intensity conflict. These include:

- **Advanced information-processing systems enabling us and our friends to store, sort, retrieve, and collate enormous amounts of data about insurgent or terrorist organizations and individual terrorists or saboteurs.**

Miniaturization of electronic components, the primary factor in the steady reduction of computing costs, has been proceeding at the rate of 20 to 30 percent per year over the past 30 years and can be expected to continue unchecked for the next 2 decades. As the size of computing elements decreases, speed of operation increases proportionately. In prospect are processing chips with components 20 to 40 times more dense per unit of size than at present, operating perhaps 6 to 12 times faster. New forms of computers that harness many such processors for simultaneous operations--parallel processing--will multiply their capacity. Storage media will experience a comparable increase in efficiency; magnetic disks should increase capacity by a factor of 10 to 15, so that in one cubic inch 300 million bytes could be stored--the equivalent of 300 novels. Optical storage media will have 5 to 7 times greater density. High-temperature superconductors are emerging from the laboratories, and fast-breaking developments in solid-state physics promise revolutionary efficiencies in electrical energy generation, storage, transmission, and electronic-device applications--e.g., lighter, more efficient, cheaper, more flexibly configured electric motors, computers, and electro-magnetic propulsion devices.

- **Low-cost space systems, long-endurance airships and aircraft, and robotic reconnaissance vehicles that allow day and night monitoring of large areas, regardless of weather or terrain, and that, in some measure, substitute for crews who in conventional aircraft might be lost or taken prisoner.**

During the mid-1980s, one unified command engaged in low intensity conflict demonstrated the potential of UAVs. This experience indicates that, given cogent operational requirements and some boosts from technology, future UAVs could prove most useful. The technologies of precision guidance, secure long-range communications, lightweight airframes and engines, and advanced sensors continue to come together to make possible new classes of robotic aircraft and low-cost spacecraft for long-endurance reconnaissance and communications relay. Unmanned aircraft powered by photovoltaic

(PV) cells might become feasible for very long-endurance missions, once transparent superconducting coatings are developed to raise the efficiency of PV cells, and lightweight superconducting motors become available. DARPA's new Advanced Satellite Technology Program will develop and demonstrate lightweight, relatively low-cost satellite systems in support of operational military needs. Such systems are likely to have special leverage for the circumstances of low intensity conflict, in which national systems are neither available nor relevant. Satellite control of UAV seems within reach, and dual-use sensor payloads can be developed for UAVs and LIGHTSATs with major advantages in commonalty, timeliness, and cost savings.

- **Networks of sensors and information processors that will monitor the activities of hostile groups or individuals and provide for the security of friends.**

Progress in data processing and small computer-based devices is expected to be rapid during the next few decades, leading to numerous possibilities for controlling access to sensitive areas and facilities. The emerging technology of smart cards illustrates one attractive technique for controlling access to critical gateways--the use of electronic keys and passports. Remote sensing of very minute coded material is already possible, and it appears reasonable to believe that the technology will support wide-area search for such identifiers. Classified documents, cash, or other items might be manufactured with embedded codes for such remote sensing. During the next 20 years, the use of smart electronic cards for reliable identification of individuals and vehicles, as well as for on-person medical, training, financial, and other records, may become pervasive. If transactions involving large sums of cash become more vulnerable to detection, these developments could attenuate international movements of illegal funds from large-scale narcotrafficking or other criminal activities. However, concomitant problems of computer security might become much more important, and the insertion of worms or viruses into complex operating systems and data bases could pose a new form of terrorism.

- **Bio- and micro-mechanical sensors with capabilities for detecting explosives, illegal drugs, and other dangerous substances.**

The mature technology of microelectronics makes possible the design and construction of miniature mechanical devices, such as gas chromatographs built into silicon chips by photolithographic and anisotropic etching processes. New knowledge about polyclonal and monoclonal antibodies makes possible biosensors for detecting various

chemicals. Together, these emerging technologies open the possibility for miniaturized detection equipment that can sense explosives and illegal drugs.

- **Vivid digital graphics of denied or dangerous areas that will permit virtual entry for U.S. personnel for reconnaissance, rehearsal of plans, and training for specific operations.**

The Defense Advanced Research Projects Agency has already demonstrated a network of over 60 simulators, each representing a ground or air vehicle operating in a computer-generated world. Each simulator is manned, and persons inside it perceive the world through iconographic scenes piped to its vision blocks, windows, or weapon sights. They see just what they would from the momentary position of their vehicle in the world. They can move about, constrained only by the characteristics of their vehicle and the terrain. As they do so, they see icons representing other vehicles when and where unobstructed line of sight allows intervisibility. These icons may represent U.S. or Soviet antagonists, and engagements, even large battles between them can take place. After a battle, it is possible to "time-travel" retrospectively through the simulation, picking points of vantage in time and space at will to review lessons learned.

DARPA has also demonstrated the ability to allow remotely positioned simulators, networked by long haul communications, to enter the same world. Hence, the location of the simulators may not be important, and training dispersed teams in tactics appears feasible. It also appears possible to generate such a virtual world in a matter of hours from aerial photography or from other digital information. DARPA believes it can advance the technology to simulate the point of view and actions of individuals on foot, as well as those riding in vehicles. For example, U.S. counterterror teams would have available digital depictions of the interior of any passenger aircraft.

IV. STRATEGIC MEANS

The United States and its allies have a marked technological lead over the U.S.S.R. because of our relatively open societies and economies, with incentives for inquiry, exchange of ideas, and innovation. Surely one way which we should pursue our strategic objectives in the Third World is through use of the Free World's technological edge.

We have not done very well to date. Within the past 2 years, a number of authoritative studies of technology relevant for low intensity conflict has concluded that technology does indeed promise significant new advantages, but awaits being pursued. For instance, a DARPA inquiry into technologies that might be brought to bear identified over two dozen possible initiatives; all were briefed to responsible officials within the Department of Defense. Not one was funded, on the grounds that there was no recognized requirement or approved statement of need from any of the armed services or any of the regional CINCs, which fitted a single one of them. A more recent, similar study by a panel of the Defense Science Board identified many of the same technological opportunities, but to date, again, no action has been taken for lack of sponsorship.

Part of the problem is **conceptual**: as a nation, we have not developed coherent managerial paradigms for low intensity conflict, as we have for the defense of Europe or intercontinental nuclear warfare. Some of our basic ideas about the Third World are simply wrong, engendered by our history of dumping war surplus there, and our rejection of all lessons from the wars in Southeast Asia--even when, as in the case of high-technology applications in low intensity conflict, they may be quite germane. As a result, not only are there few recognized requirements for research and development expressly for low intensity conflict, but also there is little perception of how such development might dovetail with that for higher intensity conflict or how resultant procurement might serve U.S. strategic purposes.

Part of the problem is **organizational**: most officials in the Department of Defense, civilian or military, view saboteurs, terrorists, and paramilitary criminals as peripheral to their responsibilities. Even if they are prepared to accept guerrillas as closer to their concerns, they see insurgencies as small wars, marginal undertakings that can be safely turned over to pick-up teams of DoD personnel and the security assistance system. American officials out in the Third World know little about technology and mistrust it.

Low intensity conflict is, for the most part, grubby, nitty-gritty work, and those who are good at it tend to have a profound antitechnical bias--not infrequently, a neo-Luddite attitude toward technology and all its works and pomps. As a result, relevant technology is neither pulled by top managers in Washington, nor pushed by requirements coming from the field.

Part of the problem is resources: even the most generous defense budgets of recent years have involved tough battles within the Pentagon over priorities, and there has been little or no priority accorded preparing for conflict in obscure places in the Third World. The prospect of further budget cuts augers ill for funds being allocated for initiatives to meet strategic concerns other than ways conflict deterrence between the United States and the U.S.S.R.

Within the U.S. government, only the Department of Defense, the Department of Energy, and the National Aeronautics and Space Agency have broad-gauge, fully articulated research and development capabilities. Yet implementing the proposed strategy of selective involvement requires not only DoD personnel and materiel, but also diplomats and information specialists, agricultural crop chemists, bankers and economists, hydrologists, criminologists, meteorologists, and a score of other professionals, each of whom needs technological support and could use technological upgrades to advantage. The following sections discuss how the United States can mobilize as a government to employ its relevant technological superiority across the range of undertakings required for the success of its strategy.

A. CONCEPTS FOR TECHNOLOGY PROGRAMS

If the President, the members of the National Security Council, and the Congress are seriously interested in improving the nation's posture for Third World conflict, we commend to them the following set of ideas on how to manage research and development from their perspectives:

I. Focus on Advanced Development

For the most part, research and development into technology that may be applied advantageously to regional or low intensity conflict in the Third World appears to require not basic research, but large-scale system engineering and integration--referred to as advanced development in the usual procurement cycle. Few inventions are needed to make

available much better materiel for supporting national strategy. In fact, since U.S. military standard specifications need not apply, one managerial recourse should always be to cast for commercially available technical solutions or non developmental items (NDIs). For example, most of the technology for significantly more effective wide-area surveillance is either at hand now or is emerging rapidly and will become available during the next 5 years. Even applications more distant, like that for portable explosive and illegal drug detectors, can be foreseen, fielding being paced less by research into the unknown than a predictable evolution of sensors and processors.

2. Discriminate Among Requirements

Low intensity conflict is different. Technology that may be cost-effective in LIC may well fail in higher intensity warfare--and the opposite is true. It is not that low intensity conflict is any more or less demanding, only that its risks and opportunities are different. Moreover, we ought to differentiate between materiel intended for the use of U.S. forces in low intensity conflict and that designed for use of allies or friends. Three examples are worth citing.

First, we have a propensity to determine the most stringent requirement and fill it; assuming that if technology can help us there, *ipso facto* we have taken care of "lesser" requirements--read low intensity conflict. For example, unmanned air vehicles for reconnaissance or for strike would be quite useful in low intensity conflict. Certainly in the present confrontations in the Persian Gulf, a pilotless aircraft, with records kept of its imagery, might better maintain watch over guerrilla launches and possible minelayers; a captured American pilot paraded through the streets of Tehran would scarcely be helpful for U.S. strategy. UAVs for such purposes are available as non developmental items. Yet debate within the DoD and the Congress over funding UAV development or procurement proceeds as though most of the participants really believe that it will be possible to consolidate all requirements, and ultimately develop one or two types of UAV that meet all present and foreseen U.S. needs, whatever the intensity of conflict. Instead, the U.S. government ought to be subsidizing development of a LIC-UAV for non-U.S. requirements, designed for use by Third World countries. A successful design would also find many takers among U.S. forces operating in the Third World. However, such a LIC-UAV is almost certainly not now described in requirements from our armed services, because the requirements are derived with a hostile electronic environment and strong air defenses in mind. Yet, when a UAV is fielded to meet those higher intensity requirements,

the chances are that it will be too sensitive for release to Third World friends, and almost certainly too expensive for them. And provision of that UAV to U.S. forces in the Third World is likely to be seen as a detraction from the readiness of U.S. forces facing the Soviets, and conceivably as a technology compromise.

Second, despite years of rhetoric about the importance of stated requirements, we have not yet built a replacement for the venerable C-47s or DC-3 aircraft still flying in most Third World nations. There was a stated requirement as early as 1966 for a reliable, fixed-wing aircraft designed to accept modular kits adapting it for roles as (1) a freight or troop carrier aircraft, (2) a medical evacuation aircraft, (3) an intelligence or surveillance collector, or (4) a fire support ship. Recently, both the Commanders-in-Chief of the U.S. Southern Command and the U.S. Transportation Command have reiterated requirements for a Third World airlifter. Though the technology is available to build a machine efficient for all four missions, night and day, the United States continues to act as though USAF C-130s filled the bill--when in fact they are demonstrably much too big, too expensive, and too complicated.

Third, requirements for discriminate weapons, for precision of aim and minimal collateral damage, may be more demanding in low intensity conflict situations than in higher intensity warfare simply because of the visibility and political costs of imprecise targeting.

3. Integrate Horizontally Across the U.S. Government

U.S. readiness for regional and low intensity conflict in the Third World entails drawing upon police, military, diplomatic, and developmental disciplines. The search for technological requirements and technological solutions, then, should extend across all the agencies of the U.S. government. A national-level study should, for example, look at computer-supported intelligence analysis and new technologies that will support--through greater information-sharing among concerned agencies--operations against terrorists, guerrillas, and paramilitary criminals traveling across our borders and capitalize upon the FBI's experience with knowledge-based expert systems. The intelligence community, for its purposes, has pushed technological frontiers with imagery, communications, and target-substance detectors and related processors, and that work seems to have direct relationship to the mission of law enforcement agencies. Hence, there appears to be a patent operational need for interagency integration of requirements, research, and development.

4. Apply Leading-Edge Technology to Low Intensity Conflict

There is no sound reason why advanced technology, even carefully protected, sensitive technology, should not be used in the Third World. Indeed, an excellent case can be made that every developmental program manager in the Government should be required to reexamine his undertaking for applications to low intensity conflict, with a view to peeling off from development an early-built, LIC-version for rapid prototyping. Most of this prototyping could piggy-back on current developmental programs, and some might be entirely separate. Complete systems for conventional or nuclear warfare might be emulated "on the cheap" for low intensity conflict.

An explicit goal of our technology policy should be to pursue low intensity conflict prototypes as a conscious design approach in developing systems for higher intensity warfare. Three advantages could accrue: (1) a low intensity conflict version could be the prototype for a system that, after protecting the electronics against jamming and electromagnetic pulse, after fitting with emission control devices, and after mounting interfaces with the numerous, complicated communications systems of the U.S. armed forces, would be ready for high intensity usage. (2) A low intensity conflict version could provide practical input on the man-machine interfaces and lend substance to doctrine and training for manning the eventual system--in effect, teach U.S. forces how to use the technology to best advantage by affording real-life experience with personnel selection and training methodology, technical documentation, operational procedures, field maintenance, tactics, and employment technique. The naval airship program described above is a definite prospect: building an airship designed for the rigors of the North Atlantic and combat against the Soviet fleet would be much simplified if we had experience with an airship designed for surveillance over the Colombian provinces of Caqueta and Amazona or the U.S. southern border. Another prospect is unattended ground sensors: the U.S. Marine Corps has a promising program underway, but one of its technical hurdles, reading the sensors through amphibious ship electronic clutter and hostile jamming, might be avoided in an early edition, low intensity conflict version. (3) Overall, with the experience and confidence gained via the LIC-prototype, the eventual system should be fielded more quickly and procured more expeditiously.

5. Fuse New Technology with Available Materiel

There are numerous ways in which older weapons systems--originally designed for use by U.S. forces in large-scale, higher intensity conventional conflict--can be modified for much more effective and efficient use in low intensity conflict. For example, the addition of low-cost night vision devices (driver/pilot goggles and cheap infra-red devices) could greatly increase the utility of vehicles and aircraft that at present have limited use at night. The provision of precise geodetic information for the direction of long-range missile and indirect artillery, rocket, or mortar fires could significantly increase operational effectiveness and discrimination. Combining advanced terminal guidance with conventional projectiles may advantageously improve precision. Opportunities for overlaying new technology should focus on low cost, ease of use and maintenance, and high operational leverage for the user.

6. Furnish Incentives for Cooperative Forces

One reason U.S. allies and friends might be interested in contributing to the security of a beleaguered Third World friend would be to gain access to U.S. technology for themselves or to participate in applying that technology to their materiel. Access to U.S. high technology might well be a key inducement for cooperative forces! Clearly, however, Congress would have to support revising those laws that constrain such uses of U.S. materiel, per the discussion in Sections III.C and III.D.

7. Pursue an Aggressive Acquisition Policy

To summarize, U.S. acquisition policy to support U.S. strategy in the Third World should aggressively press (1) proponency--justification and budgetary support--by all potentially benefitted agencies, departments, or services; (2) funding through, and development management by, a designated lead agency or department responsive to these proponents; (3) identification and exploitation, when feasible, of commercially available equipment, of upgradable obsolescent systems, or of systems already in development to meet requirements for higher intensity warfare; and (4) utilization of the lesser-threat environments of low intensity conflict and Third World regional warfare to prototype systems and system-components (e.g., sensors and platforms) and to obtain experience with the hardware or software and their human interfaces.

B. ORGANIZATION

U.S. technology can be used to provide our military forces and our law enforcement agencies with decisive new advantages, enabling them to cope more effectively with various forms of Third World conflict during the next 20 years. But a much higher priority must be given to advanced developmental activities designed to exploit the potential of technology for meeting their requirements. Our technology base for advanced sensors, secure communications, and computers can be used to support the accelerated development of systems for countering saboteurs, terrorists, and insurgents and for dealing much more effectively with illegal drug trafficking. To date, there has been no government-wide mechanism for applying that technology to the development of such systems.

1. The Low Intensity Conflict Board of the NSC

The United States needs to integrate the conversion of its impressive technological potential into useful materiel for Third World conflict with its long-term strategy for other forms of conflict. Development of a **National Technology Plan** should be one of the central goals of the newly established Board of the National Security Council (NSC). The LIC Board is at present a cabinet-level committee reporting to the NSC. Its membership ought to include all departments and agencies seized with issues relating to sabotage, terrorism, insurgency, and paramilitary criminality.

The LIC Board's National Technology Plan should establish clear priorities and define the broad contours of long-term investment, development, and acquisition that strike an appropriate balance between military issues (such as countering terrorism and aiding against insurgency) and non-military issues (such as helping to design and build better passive defenses against terrorists here in the United States, or improving a Third World nation's public health program, or promoting international banking controls on narcofunding). The National Technology Plan should explicitly provide for (1) **collective proponenty**--justification and budgetary support--by all potentially benefitted agencies, departments, or services, and (2) **lead agency**--funding channeled through, and development management by, one designated agency or department responsive to these proponents. DoD's approach for analyzing competitive developmental tracks might be adapted to preparing the plan, which ought to involve fully coordinated interagency views upon requirements, design, engineering, and production.

Were the United States to adopt such a National Technology Plan, and persistently implement it over the span of the next Administration, large-scale narco-trafficking, rural insurgencies, sabotage, and terror, such as we now confront, might be rendered distinctly less threatening.

2. The Defense Advanced Research Projects Agency

DARPA is the most attractive candidate for lead agency among the several departments, agencies, and interagency groups capable of planning and managing the development and acquisition of materiel systems for low intensity conflict. DARPA's recent survey of relevant technology has already been mentioned. Moreover, its ongoing programs will provide strong points of departure for systematic new undertakings for low intensity conflict. Among DARPA's relevant developments are SIMNET, the networked virtual environment generator; the AMBER long-endurance UAV; the LIGHTSAT; and its advanced computers, sensors, and guidance systems.

The National Technology Plan might underwrite formation of a new office in DARPA to achieve its objectives, with new funding that covers both research and system engineering/integration. DARPA is accustomed to arranging support from the National Security Agency and the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), and other organizations having technical expertise in relevant areas. A prime systems engineering and technical assistance (SETA) contractor, such as Los Alamos National Laboratory, should be engaged to accomplish the detailed planning and developmental support under DARPA's oversight. The regional CINCs should hire their own separate SETA contractors to assist them in articulating requirements, interfacing with the developers, and managing the operational implementation of systems.

Due to the major potential contribution of lighter-than-air aircraft to support of national strategy for low intensity conflict, DARPA should be funded and tasked to build a prototype of a long-endurance, advanced airship. This airship would likely be of advanced composite rigid structure, integrate advanced, developmental propulsion and sensor systems, and might be designed with modular payloads for surveillance or logistical missions. DARPA's work should be conducted in coordination with the Navy and the Air Force to provide technology transfer to each service to support follow-on airship developments. The requirements of other potential users, such as the Drug Enforcement Administration and the Coast Guard, should be considered. First flight of such an airship should be sought by the mid-1990s.

3. The Joint Chiefs of Staff

The Chairman, Joint Chiefs of Staff should establish a planning/programming activity in the Joint Staff as part of the National Technology Plan. The first major project of this new activity would be operational coordination of the DARPA program with Service programs, ongoing and prospective.

Given the uncertain future of some U.S. bases, it would be useful to build prototypes of basing alternatives, using the concepts described previously. The long-term nature of alternative-basing technology implies that it must be carefully structured and funded if it is to survive several annual budget cycles. For this reason, the Chairman of the Joint Chiefs of Staff should establish a new joint panel on Alternatives to Third World Basing to carry out a comprehensive assessment of political issues and technical opportunities and to coordinate Service approaches. This panel's goal would be to recommend a new joint program, to begin in FY 1990, that would develop and build several actual alternatives by the mid-1990s. If successful, these could be scaled up by the end of this century, if deemed necessary, as supplements to or replacements for our present Third World bases.

The joint panel would also consider unit configuration alternatives and long-range means of supplying intelligence support (e.g., long-endurance UAVs controlled by manned airships, or through LIGHTSATs), communications support (e.g., air-deployable LIGHTSAT ground stations), and means of logistic and fire support which would significantly reduce need for nearby terrestrial basing. Based on JCS recommendations, a joint Basing Alternatives program could be incorporated in the National Technology Plan.

4. The Law Enforcement Agencies

The National Technology Plan should direct formation of a police-security working group under FBI leadership to set forth the organizational and technical requirements for significant improvement in police forces of Third World nations. To that end, the working group should present proposals to the NSC's LIC Board that recognize both that help with police training and materiel might be a particularly effective cooperative force contribution and that U.S. support will produce better international cooperation in dealing with the international security problems like terrorism. This working group should include DoD, because the U.S. armed forces ought to assume a broader role in training Third World police organizations that are subordinated to a Minister of Defense or that have paramilitary

organizations or territorial security functions. The working group could also promote the sharing of modern technology for dealing with internal security problems through multilateral mechanisms, such as regional and international police organizations. Such organizations need to develop better appreciation of advanced technologies that could make police work easier in the Third World--a matter where the United States can take the lead.

The police-security working group should act on defenses against terrorism and should propose to the NSC's LIC Board Federal architectural security design standards. These should be presented to Congress for legislation that would mandate their adoption, phased-in over time, for selected public-use facilities. These standards could be developed and enforced either by a government security agency (with enforcement assured either through regulation or strict licensing) or by an association of operators, such as the Airport Operators Council International.

In the technology area, perhaps the single most important issue that the police-security working group might address for the NSC's LIC Board is a subplan for developing technology capable of reliable detection of explosives, illegal drugs, or other controlled substances in non-intrusive, light-weight, low-cost, public-safe applications. Such detectors could be proliferated to cast a wide net for car bombs and other explosive devices or for drug dealers and narcotrafficking couriers. Emerging technologies of micromechanical devices and biosensors promise practical detection equipment by the early 1990s. To date, bits and pieces of relevant technology--such as preconcentrators and automated gas chromatography systems--have been under development by several agencies, including the Federal Aviation Administration, Department of State, and Central Intelligence Agency. The time is ripe for a coherent, well-funded, accelerated program that targets the early 1990s for widespread field testing and initial deployment of first-generation miniaturized explosives detectors.

A second important issue for the working group would be the production of illegal drugs abroad. Given the observables associated with cocaine processing labs, an integrated wide-area surveillance system should be part of the National Technology Plan. That plan should establish the clear objective to possess the capabilities necessary to help local governments eliminate dozens of cocaine labs each month in a campaign to find and destroy all large-scale cocaine-processing facilities in the Western Hemisphere.

The Drug Enforcement Administration, working with the military Services and DARPA, might be charged with designing an integrated intelligence/response system for

achieving this goal. Another, perhaps more promising, way to limit illegal drug activity is to identify the movement of the enormous sums of money that move through the international monetary system. If this money can be identified and thus captured, it could seriously impede the drug business. This too should be incorporated into the National Technology Plan.

5. The Intelligence Community

The National Technology Plan should look to the intelligence community for a major upgrade in accurate and timely tactical intelligence for countering Third World threats. There are two prerequisites for effective tactical intelligence systems. The first is a system architecture, in which all of the key trade-offs (performance, reliability, cost, survivability, resilience to countermeasures) have been analyzed and selected. The second, within the overall framework of such a system architecture, is detailed system engineering and integration of subsystems, taking advantage of available and/or emerging sensor and processing technologies. R&D programs may be needed to develop technologies and subsystems that are not currently available.

This approach means that the first order of business is to develop parametric analyses of LIC-related, wide-area surveillance systems, incorporating all of the key trade-offs and near-term technologies. After these analyses are completed, decision-makers will have the information they need to select an appropriate system architecture and to plan and structure the specific programs that will produce the needed technologies, subsystems, and overall integration of the final system.

Given adequate priority, an architecture for tactical intelligence systems could be designed and programmed in the above sense, producing in the mid-1990s an integrated intelligence system that far exceeds the performance of current ones in dealing with these nations' insurgencies. In an overall sense, the new tactical intelligence systems would be planned and operated by the U.S. regional CINCs, but major portions--especially ground stations for LIGHTSAT and UAVs--could be in the hands of the supported nation. General policy approval for this tactical intelligence subplan would flow from the NSC's LIC Board, while detailed policy implementation and operational coordination would come from the ASD/SO-LIC in close coordination with the ASD/C³I. The Interagency Research and Development Council (IRDC) also needs to be deeply involved in this process.

C. RESOURCES

Regional and low intensity conflict threatens all Americans and can be met effectively only with a response from the whole government, through all of its several organizations. While the United States can prepare for such conflict from a position of strength, much of our national potential for dealing effectively with challenges to U.S. objectives in the Third World is simply unrealized. Moreover, that potential is likely to remain untapped without a major bipartisan effort to enlighten public understanding of, and to win support for, new concepts for bringing our advantages to bear. Management of Third World conflict can not be relegated to the Department of Defense; nor can it be regarded simply as one aspect of peacetime foreign relations and assigned to the Department of State. Rather, it requires drawing on all elements of our national strength, concerted by the President and the National Security Council, developed in conjunction with the Congress, and resting ultimately upon support of an informed people.

The United States is not now well-postured for regional and low intensity conflict, and the nation needs to contemplate a new concerted effort. The resources required will probably be much less quantitatively than the 1980-1984 defense rebuilding, but qualitatively, possibly more demanding.

The key resource will be people: cadres to create the intelligence, transfer the technical skills, plan the development projects, shape the technology, and train and educate the future leaders of countries so different from our own. Even were we to start tomorrow, with very strong backing, it will be years before all the good people we need, with the proper training, will be available.

There remains the question of funding the proposals advanced above. Without adequate funds, this strategy will lack substance. But what is proposed here is not expensive compared with other undertakings of the U.S. government, and the payoff appears to be highly significant. Much of what we are now doing *vis a vis* the Third World conflict is inefficient, and these recommendations could be paid for, in part, by improved methods and trade-offs. Some of these proposals could be underwritten within current funding, through reprioritization, reallocation of functions and resources, and reorganization within and among affected departments and agencies. Some initiatives, such as improved counterterrorism and countersabotage measures, might be funded by State and local governments and private enterprise. Only a portion would require wholly new Federal budgeting and Congressional appropriations.

The Working Group has assessed as best it could the total impact of all the proposals included in this report for improving the nation's readiness for regional and low intensity conflict. These computations, because they crossed traditional budget lines among departments and agencies and postulated unusual cost-sharing arrangements, involved much guesswork. But even so, the Government could act on the previously set forth recommendations without impairing other facets of our national strategy. The notional figures the Working Group reached for buying what departments and agencies have not yet provided for, using the best estimates obtainable from experts, entail outlays of \$12 billion per year (an amount equivalent to about 4 percent of the current DoD budget).

**A NATIONAL PROGRAM
FOR
REGIONAL AND LOW INTENSITY CONFLICT
Proposed Funding Levels
(\$ Billion FY 88)**

	<u>FY 90</u>	<u>FY 91-94</u>
Strategic Ways ¹	3.5	14.0
RDT&E, and Acquisition ²	3.5	14.0
Operations & Maintenance ³	1.5	7.0
Intelligence ⁴	<u>3.5</u>	<u>14.0</u>
	\$12.0	\$49.0

¹Section III, C through F, H and I: Security Assistance, Help Others Help Themselves, Alternatives to Bases, Aid to Freedom Fighters, Defense Against Terrorism, and Suppress Illegal Drug Trafficking.

²NSC LIC Board's National Technology Plan

³U.S. armed forces and law enforcement agencies

⁴U.S. intelligence community activities

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