

EPS QUARTERLY

the newsletter of economists for peace and security

Perception of

extreme risk

is a function of

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"dread risk" and

"unknown risk."

The Counterterrorism Issue

You can't open a bottle of nail polish remover on an airplane without everyone within twenty feet knowing at once.

See page 10

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War and famine. Peace and milk.

- Somali proverb

Terrorism in Context

David Colt

Since 1983 the US Central Intelligence Agency has defined terrorism as "premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience." Compared to the many dangers facing

the US today, the threat of terrorism is relatively small. Nonetheless, at nearly all levels of US society the response to terrorism has been grossly disproportionate. Since September 11th, 2001, fear of terrorism has consistently dominated the national agenda, the news cycle, and day-to-day civil life. This paper will examine the source of the perception of the threat of

terrorist attack. In particular, by juxtaposing terrorism with other risks, we can see that strategies responding to the concept of terrorism may actually hinder our ability to mitigate the most dangerous threats.

Empirically, the dangers of driving dwarf the death tolls from manifestations of terrorism, the current and potential casualties of global warming, or the use of nuclear, chemical, biological, or radiological weapons (NCBRs). We can plot non-expert or lay willingness to accept a given level of risk as a function of the perceived level of control that can be exercised over it, and in the case of imposed risks, with the perceived motives of the imposer. (See Figure 1, page 2.) A risk's acceptability, however, does not necessarily correlate with its demonstrated or potential threats.

In assessing the risks posed by terrorism, the layperson faces a serious difficulty: terrorist incidents are inherently unpredictable. There is no generally accepted method of calculating comprehensive damage. This is not to say there are not many attempts to quantify the risk or cost of terrorism. While many studies examine deaths, injuries, frequency of incidents, and so on, the induced fear drives many secondary consequences. Unable to assess accurately the true threat of terrorism, the ordinary citizen can only analyze the perception of risk.

> While assessing the actual threat of terrorism is difficult even for experts, we can quantify and predict the "perceived threat." For non-experts, the perception of extreme risk is a function of two factors: "dread risk" and "unknown risk." Sociologists and social psychologists define a "dread risk" as a felt loss of control, feelings of dread, the apprehension of catastrophic potential

or of fatal consequences, and the anticipation of inequitable distribution of risks and benefits. "Unknown risks," on the other hand, they define as those hazards judged to be unobservable, unknown, new, and/or where the full damage becomes apparent only after the event. The higher a hazard's score on the "dread risk" scale - that is, the higher its perceived risk - the more people want its current risk reduced, and the more they want authorities to intervene to achieve that desired reduction in risk. The higher a hazard's score on the "unknown risk" factor, the greater the potential for an adverse event's risk to be socially amplified.

Any adverse event can trigger "social amplification." The terror attacks of September 11th, 2001, which belonged to either the "riskunknown" or the "risk-previously-ignored" categories, and which had consequences or potential consequences for many people, constituted such a "socially amplified" event. Through the process of risk amplification, which increases societal fear of imposed risks whether benign or malign, the adverse impacts of a horrific event

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can extend far beyond the direct damages to victims and property. In fact, an event much less drastic than the September 11th attacks can trigger significant or severe indirect consequences.

The US national character cherishes the importance of individual freedom to choose which risks to deem acceptable. The popular reaction to plane and train crashes is more acute than car accidents, and not merely because these crashes can involve mass casualties and dramatic footage. The reaction is also exigent because the US public demands a higher standard of safety in circumstances in which citizens voluntarily hand over control to another. Terrorism is an imposed and malignant hazard. These two qualities together mean that the perception of the risk of terrorism is subject to the highest level of social amplification. Accordingly, public demand and government efforts to mitigate the threat have been disproportionate to terrorism's demonstrated dangers.

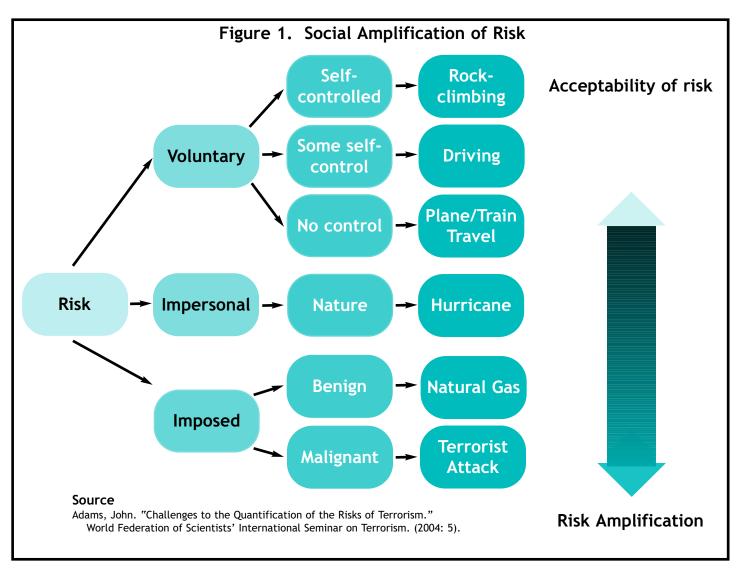
I. Social Amplification of 9/11: Impacts on the US

On September 11th, four planes-turnedmissiles took the lives of 2,874 individuals and inflicted \$33 - 36 billion in immediate damages. It was the largest terrorist attack ever on US soil and its impact on the US was cataclysmic. Abruptly conscious of its vulnerability, the US overreacted to the threat, with costly consequences.

Civilians

The use of airlines on September 11th exacerbated the public's fear of flying, and with deadly consequences. Hyperaware of aviation's role in the disaster, social amplification of the risk led to a faulty perception of its dangers. Some individuals consequently substituted driving for flying.

We can only assume that individuals made this substitution in the interests of safety, hoping thereby to avoid the threat of another hijacking. But a look at the numbers shows the irrationality of their response. 256 lives were lost aboard the four hijacked planes on September 11th. In the US, an average year's worth of automobile accidents take many times that amount of lives: in fact car crashes are the primary cause of death for individuals between four and thirty-five. The 256 airline deaths on that day are roughly equal to an average 2.5 days of US road fatalities. Nationally, an average of thirty-eight thousand individuals lose their lives in automobile accidents - every year. (continued on page 4)



Letter from the Director

I am too young to remember when the Kennedys or Martin Luther King were shot. 9/11 will be the defining event of my generation. Along with the rest of the world, I watched in horror on that beautiful Tuesday morning. But somehow my sorrow has not turned to fear and anger.

Perhaps because I lived in London during the mid-1970s, when the possibility of an IRA bomb in the Underground or Selfridges was a daily fact of life, I seem not to have reacted in the same way to the attacks of September 11, 2001 as many others in this country have done.

In this issue of the *EPS Quarterly*, we take a look at Counterterrorism. The first step in formulating any security policy is assessing the threat. These days most talk of counterterrorism refers to intelligence activities: covert surveillance, signals intelligence, satellite intelligence, and electronic intelligence.

The recent stopping of a planned attack in England was a classic example of the functioning of intelligence agencies in counterterrorism. An undercover operative infiltrated a terrorist cell and was able to discover the plot well in advance of its actual execution. Twenty-four people were arrested, and, apart from some inconvenience for those who prefer to carry their own beverages onto planes, the police were heroes all round. Except, as James Galbraith explains in his piece, "Groundhog Day," there doesn't seem to have been much of a plot to foil.

However, I believe we, as a nation, are suffering from an over-inflated fear of terrorism in the first place. In his article in this issue, "Terrorism in Context," David Colt discusses the phenomenon of "social amplification" of fears. He explains that the security strategies which are developed based on this exaggerated fear may actually hinder our ability to mitigate other more dangerous threats.

Even if you accept the Bush Administration's assertion that "[t]errorist networks currently pose the greatest national security threat to the United States," you might find that declaring a war of decades' duration is not the best response. You might instead think that seeking to strengthen alliances, to build on treaties that for 50 years now have kept the world from nuclear war and rapid proliferation, that keeping our promises and taking leadership in engaging partners would be the smart, pragmatic action to take.

In her article, "Small Arms, Big Problem: Many Solutions," Frida Berrigan discusses one forgotten aspect of the supply chain which feeds terrorists, insurgencies and other non-state paramilitary groups. She discusses the need for an international framework to control the flow of these simple, easy-to-use weapons. Just in the last few weeks (since Ms. Berrigan's article was written) a draft of a treaty has been introduced. At the UN General Assembly in October, governments will vote on whether to start negotiations on an Arms Trade Treaty regulating international arms transfers.

I see great hope in this development. In 1933 Franklin Roosevelt warned the country that we need only fear fear itself: nameless, unreasoning, unjustified, paralyzing terror. In diverting resources from solutions which are actually proven to work, to policies which may sound better in the short run , we are allowing our fears to get the better of us.

I am blessed to have found a job that allows me to express my personal values in a meaningful way. Economists are naturally inclined to take a step back, to look for evidence, to consider the full costs, effectiveness, and alternatives toward the desired goals before making a recommendation. When formulating security policy, this seems to me eminently reasonable.

In my efforts to turn my sorrow over the events of 9/11/01 to healing, I find that I have been thinking a lot lately of compassion. I believe that one of the things that I can do to help prevent another such happening is to open my heart to the victims, the perpetrators, those who are paralyzed with fear, and those who are goaded by fear to make bad decisions. And once I have sent out into the world such small peace as I have to give, it is my further duty to help them see the light by publicizing the work of the members and friends of EPS; thus, I trust, to strengthen the voices of reason and non-violence.

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Countermeasures: Terrorism in Context (continued from page 2)

The State of New York alone averages over a thousand traffic fatalities annually. The risk of driving a car is many times greater than flying. In fact, driving the length of a typical nonstop segment is approximately 65 times as risky as flying (based on the likelihood of death per mile).

Perhaps those who substituted driving saw the September 11th attacks as predicting an increase in terrorist attacks on airlines. Although the reasoning is logical, the danger of flying should be judged by its primary substitute, driving. For aviation to become as risky as driving, disastrous airline incidents on the scale of September 11th would have to occur 120 times over a 10-year period, or about once a month. A terrorist campaign targeting aviation, like the plot reportedly foiled on August 10th, 2006, still would not justify an overall, long-term preference for driving over flying.

Notwithstanding the evidence, after the September 11th hijackings many in the US did substitute ground transportation for commercial aviation. In the fourth quarter of 2001, there was an 18 percent reduction in the number of passengers aboard commercial airlines compared to the same period the previous year. Even after controlling for the effect of the weakened US economy at the time, the effect persisted, albeit at a slightly lower decrease of approximately 10 percent.

This reduction in the use of commercial aviation led to greater automobile use and a subsequent increase in driving costs and deaths. A study comparing motor vehicle fatalities in the three months following September 11th to averages from the previous three years found an additional 365 road deaths. And a six-month analysis estimated an additional 242 driving fatalities per month, or about 1,200 total additional deaths. The substitution of road travel for air travel was the primary mechanism explaining the increase in non-commercial driving fatalities.

Both studies reported a strengthened public aversion to flying, consistent with the theory that new or previously unknown risks are subject to the greatest degree of social amplification. The terror attacks of 2001 brought the nation's attention to the real threat of airline hijacking, but US authorities did not put the risk in the context of other dangers. The amplification of perceived risk consequently led to poor individual decisions and unnecessary deaths.

Civilians overreacted to the *possibility* of hijacking; the US government overreacted to the *concept* of terrorism.

Government response

As civilians adapted to post-September 11th life, they took additional precautions for their own safety, and the government enlarged its role as a security provider for the US public. However, the government was afflicted by the same distorted perception of the terrorist threat that led to the amplified civilian aversion to aviation. Civilians overreacted to the possibility of hijacking; the government overreacted to the concept of terrorism. There was indeed a catastrophic terrorist attack on US soil. Though this was not an entirely new phenomenon (the World Trade Center itself was attacked eight years before), specific characteristics of the 2001 attacks stood it apart from previous attacks.

The use of planes as bombs accounts for the September 11th attacks' cataclysmic impact on the US. The majority of deaths, economic costs and the overwrought social response resulted from the collapse of the World Trade Center towers. Had the planes been destroyed mid-air, the attack would likely have been managed within the parameters of aviation security. There might have been no "war on terror." The weakness in aviation security would have been addressed and the nation might have moved on.

But the planes did crash into the buildings, and the US response was a war on terrorists everywhere. As President Bush proclaimed: Our war on terror begins with al Qaeda, but it does not end there. It will not end until every terrorist group of global reach has been found, stopped and defeated.

Terrorists, after all, are individuals or groups that support or perform premeditated, politically motivated acts of violence against noncombatants. Even considering the impact of the 2001 attacks, the danger of terrorism is relatively small compared to many dangers facing society. The threat is not terrorism *per se*; it is the potential terrorist use of apocalyptic weapons that present a significant threat to the US.

Unlike the war in Afghanistan, the purpose of Operation Iraqi Freedom was to address the imminent threat of Iraq's "weapons of mass destruction" capacity or potential. I make this point to distinguish the different goals of two separate "war on terror" operations. Operation Enduring Freedom's mission was to disrupt terrorist activity in Afghanistan and deliver justice to those responsible for the attacks of September 11th (Statement of President Bush, October 7, 2001). Operation Iraqi Freedom, on the other hand, was ostensibly waged to disarm Iraq and to prevent its using or spreading NBCRs to terrorist organizations.

When UN weapon inspectors' reports made it abundantly clear that Iraq neither possessed nor planned to develop NCBRs, the Bush administration continued to insist upon the legitimacy of the war as a component of the "war on terror." Either forgetting or abdicating its primary responsibility to protect its citizens, the administration decided that war on a tactic, rather than an enemy, was worth billions of taxpayer dollars and thousands of military deaths.

The Congressional Budget Office estimates the cost of the Operation Iraqi Freedom at \$318 billion through FY2006, but economists Joseph Stiglitz and Linda Bilmes assert that a conservative estimate of the direct budgetary costs to the taxpayer of the war in Iraq is more likely to cost range of \$750 billion to \$1.2 trillion, assuming that the US begins to withdraw troops in 2006 and diminishes its military presence over the next five years. At present, the

number of US casualties in Iraq stands at 2,570. The number of monthly attacks continues to increase and shows no signs of abating. In his most recent report to the Senate Armed Service Committee, John Abizaid, the top US commander in the Middle East, asserted that if the violence does not stop, Iraq will verge on civil war. Figure 2, page 6, shows the costs of the attacks and of the military response.

Among the numerous obstacles presented by the "war on terror" is the inability of the US to fund a war with no specific enemy or end. The fiscal resources of even the richest country in the world are finite. US security priorities should assign resources not only on the basis of the military or judicial legitimacy of a proposed initiative.

Terrorism is a multifaceted threat, with some manifestations more dangerous than others. It would be logical for catastrophic threats to receive more attention than a scenario delivering only minor harms. In vowing to eradicate terrorist ideology, US security since 2001 has largely been limited to countering terrorist groups. An effective policy will prioritize the response to terrorism, including the resources devoted to combating its practitioners, within the context of a range of differing levels of potential harm, including non-terrorist dangers.

The sobering costs in blood and treasure contrast starkly with the Bush administration's optimistic view that liberating Iraq would stabilize the Middle East and secure the US Instead of bringing peace and safety, to date the war on terrorism has been costly and ineffective. In addition to the lives lost and the resources spent on Iraqi freedom, the continuing US military presence has increased anti-US sentiment throughout the Middle East, in turn raising sympathy for, and motivating people to join or support, radical Islamists.

II. Opportunity Costs of the "War on Terror"

In 2005 another catastrophic incident occurred on US soil. Hurricane Katrina took the lives of 1,861 people and wreaked widespread havoc, with damages to date estimated at \$157 billion. But this disaster did not spark any significant federal effort to identify the cause of the attack or to free the world from its threat. Hurricane Katrina was the greatest natural disaster in US history. Although its connection to global warming is still subject to scientific debate, the increased strength of hurricanes takes a tremendous toll on the US and should be met with the same concern as a large-scale terrorist attack. In fact the two threats share remarkable similarities:

The longer we ignore it, the greater the danger grows, whether the problem is "WMD" or rapidly increasing levels of carbon emission.

1) The longer we ignore it, the greater the danger grows, whether the problem is the development and proliferation of NCBRs or rapidly increasing levels of carbon emission.

2) The timing and extent of damage cannot be predicted.

3) An isolationist strategy is impotent to prevent the disasters.

It is important to distinguish the threat of terrorists with NCBRs from traditional terrorism or even terrorism that uses planes as missiles. The Bush administration claims that containment of NCBRs is a high priority. Its 2004 National Security Strategy bluntly declares:

Weapons of mass destruction - nuclear, biological, and chemical - in the possession of hostile states and terrorists represent one of the greatest security challenges facing the United States.

Hans Blix, former Chief UN Weapons Inspector in Iraq, deftly explains why securing NCBRs should be a top priority:

Nuclear, biological and chemical arms are the most inhumane of all weapons. Designed to terrify as well as destroy, they can, in the hands of either states or non-state actors, cause destruction in a vastly greater scale than any conventional weapons, and their impact is far more indiscriminate and long lasting.

President Bush acknowledges that the "greatest threat" to the US is the specter of

a "secret and sudden attack with chemical or biological or radiological or nuclear weapons." He described the possibility of such an attack as less remote than during the Cold War, contending that unlike the Soviet Union, terrorists view such dangerous arms as weapons of "first resort." Making matters worse, the President noted, "these terrible weapons are becoming easier to acquire, build, hide, and transport."

The US has kept up its funding of Cooperative Threat Reduction (CTR) programs with great success, but experts still perceive the risk of attack to be high. By focusing its offense on terrorists and not the weapons terrorists may choose, the US security strategy has been inefficient and very costly.

Nonetheless, tracking down potential perpetrators of attacks with NCBRs is not an efficient strategy. With an overwhelming majority of world powers against the use of NCBRs, if the US were to meet its obligations under the Nonproliferation Treaty it would likely engage an international community of nations willing to forego and secure fissile materials, and chemical and biological weapons.

III. The War on Global Warming

Former Vice-President Al Gore's blockbuster film, An Inconvenient Truth, argues for global warming as the single greatest threat to our world. Hurricane Katrina demonstrated the dangers of changing weather systems. Although as previously noted it is not yet possible to determine the role of global warming in increased hurricane strength, much of the scientific community agrees that there is likely to be a connection. Hurricane Katrina's devastation is estimated at \$157 billion in damages (without including mission costs or the lost human capital of 1,861 deaths). Congress has provided \$62.3 billion so far for emergency response and rebuilding. Figure 3, page 6, shows the costs in lives and dollars of the September 11th, 2001 terrorist attacks, Hurricane Katrina, and US annual car accidents.

Whether or not global warming is directly responsible, Katrina's devastation should be taken as a reminder of the power of of nature. The current US administration may be skeptical, but the scientific community

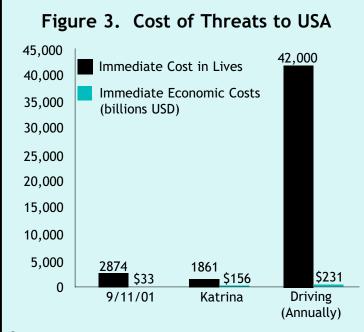
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is certain: carbon emissions are responsible for atmospheric warming.

Despite the huge costs of natural disasters, the US has chosen to ignore the threat presented by global warming. In 2005, the US backed out of the Kyoto Protocol - the international initiative to curb carbon output - citing economic drain as its rationale. However, if we add up the costs of all the recent natural disasters (Katrina's damage alone was greater than one percent of US GDP), and if we accept that there is no reason to expect such effects to weaken, the costs of not participating might be much higher than the projected one to three percent of GDP it would cost to fulfill our obligations. Despite US absence, most of the world has signed the Kyoto Protocol, a legally binding commitment to lower carbon output.

IV. Policy Recommendations

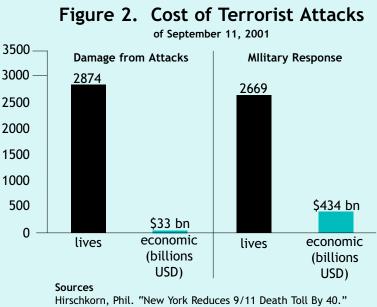
NCBR proliferation and global warming cannot be solved with an isolationist strategy. Neither threat respects national boundaries, policies, or strategies. These two greatest threats can only be solved through global cooperation. As the world's sole remaining superpower, the US is uniquely placed, and arguably uniquely obligated, to lead programs and initiatives to increase international



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security, prosperity, and peace. After September 11th, 2001, the US adopted a unilateralist strategy that has hindered progress in the struggles against NCBRs and global warming. Addressing and actively participating in programs to improve the world would yield myriad of benefits. In addition to international gratitude, the US would enjoy the opportunity to achieve security aims that it cannot accomplish on its own.

NCBRs are an enormous threat, and not just in the hands of terrorists. Nonetheless, separating the threat of terrorists with NCBRs from terrorists without has important political implications. The overwhelming majority of nations oppose terrorist possession of NCBRs, while very few support the US "global war on terror." Its unprecedented military power notwithstanding, the US is unable to stop NCBR proliferation on its own. Only by forging global partnership and harnessing the strength of the international community is a NCBRfree world within reach. Global cooperation has the potential to ameliorate, not merely palliate, the threat of NCBRs in a manner beneficial to the entire world. The US needs to work with the international community to realize the common goal of a safe and healthy planet.

David Colt is an economics and English major at Reed College (class of 2008). He served a summer internship at EPS, during which he researched and wrote this article. Sources online at http://www.epsusa.org/publications/newsletter/sep2006/colt.htm.

Small Arms, Big Problem: Many Solutions

Frida Berrigan and William D. Hartung

It has been said that there is nothing small or light about small and light weapons. There are 639 million of these weapons in circulation and 8 million more are produced every year. More than half a million people each year, or 10,000 each week, are killed by small arms. Most victims are civilians and at least a third of them are killed in countries at peace.

Small arms and light weapons defined

Most writing on small arms and light weapons uses as its point of departure the definition developed by the Report of the Panel of Governmental Experts on Small Arms (UN General Assembly, 1997). The most comprehensive assessment of the global trade, global stockpiles, and global impacts of small arms and light weapons is the Small Arms Survey. The survey defines small arms and light weapons as follows:

- Small Arms: revolvers and self-loading pistols, rifles, and carbines, assault rifles, sub-machine guns, and light machine guns;

- Light Weapons: heavy machine guns, hand-held under barrel and mounted grenade launchers, portable anti-tank and anti-aircraft guns, recoilless rifles, portable launchers of anti-tank and anti-aircraft missile systems, and mortars of less than 100mm caliber.

The main problem with this definition from the point of view of studying the small arms/terrorism link is that it excludes explosives, an increasingly popular tool of terrorist groups and insurgents, whether used by suicide bombers or in improvised explosive devices (IEDs). The original report of the UN Panel of Experts recognized the importance of explosives as a weapon of war and terror, but did not include them in their definitions of small arms or light weapons. Until research on explosives receives as much attention as analysis of small arms and light weapons, not enough will be known about the channels through which they are disseminated to non-state actors.

What is terrorism?

Terrorism is a tactic, not an ideology. Terrorist attacks are generally, but not exclusively, aimed at civilian populations and are designed to instill fear and provoke reactions from the targeted group or nation.

The United Nations General Assembly

More than half a million people each year, or 10,000 each week, are killed by small arms. Most victims are civilians and at least a third of them are killed in countries at peace.

has defined terrorism quite broadly, as criminal acts intended or calculated to provoke a state of terror in the general public, a group of persons or particular person for political purposes.

The definition further notes that these acts are

in any circumstance unjustifiable, whatever the considerations of a political, philosophical, ideological, racial, ethnic, or other nature that may be invoked to justify them.

Different agencies within the US government use different definitions of terrorism. For example, the Pentagon defines it as the unlawful use of - or threatened use of - force or violence against individuals or property to coerce or intimidate governments or societies, often to achieve political, religious, or ideological objectives.

By contrast, the CIA defines terrorism as

premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience. Given these conflicting definitions, this article will address the supply of small arms and light weapons to non-state actors, a category that includes terrorists, insurgent groups, and paramilitary forces. This choice is reinforced by the fact that most non-state actors, terrorists or not, use similar channels of finance and distribution to acquire small arms and light weapons.

Challenges to small arms control

Efforts to curb the distribution of small arms and light weapons to non-state groups face daunting challenges.

First and foremost, the millions of military-style firearms, man-portable air defense systems (MANPADS), light mortars, grenades, and other small arms and light weapons in existing stockpiles make it virtually impossible to keep these weapons out

of the hands of militias, insurgents, terrorists, and other non-state actors. The absence of uniform regulations on arms brokering, dealing, and shipping comprise another set of obstacles to curbing the trade. Finding ways to cut off funding that comes from techniques like "resource for weapons" swaps is also a considerable task.

Working on all of these fronts - stockpile reduction and security, coordinated international regulation of brokers, shippers, and arms dealers, and tracking and monitoring systems that may eventually be used to cut off financing and transfers of illicit small arms and light weapons at the source - should make it considerably harder and more expensive to get hold of small arms and light weapons.

It will not stop the flow entirely. But even slowing the flow of these deadly weapons can have important long-term consequences. To the extent that restricting proliferation of small arms and light weapons increases the time needed for non-state actors to get these tools of war, it may increase the time and space available to negotiate peaceful resolutions of

disputes and develop alternative solutions to the problems that fuel the spread of small arms in the first place.

Countries attending the recent review conference on small arms made no new commitments to actions aimed at limiting the trade beyond what they had proposed at the original 2001 conference on the subject. But there are still many ways to pursue curbs. Here, we discuss a few of the proposed solutions. None are being offered as the answer; rather each is part of an array of measures designed at least to make acquisition of small arms and light weapons more difficult for terrorists, warlords, insurgents, and other nonstate actors.

Reduce global stockpiles and improve stockpile security

As long as there are hundreds of thousands or millions of small arms and light weapons stockpiled and ready to be accessed by brokers or seized or bought by terrorists, slowing down the flow of these weapons will be difficult, if not impossible.

The United Nations has done some work on disarming combatants in the wake of rubric conflicts. under the of Demobilization, Disarmament, and Reconstruction (DDR). [For more on DDR, see Disarmament and Development, an ECAAR paper produced in 2000. Online at http://epsusa.org/publications/ papers/disarm.pdf - Ed.] States like Mali, El Salvador, South Africa, Mozambique, and Albania have put considerable energy into gun destruction and buyback programs. But so far these efforts have only scratched the surface of what needs to be done to significantly reduce global stockpiles. More concerted, far better funded efforts are needed.

One bill in the US Congress, the Lugar-Obama bill, would make \$33 million in funding available in FY 2007 to help destroy the most dangerous small arms and light weapons around the globe. The legislation is modeled on the successful Nunn-Lugar program for destroying and securing "loose" nuclear weapons. Other suggestions have included that organizations like NATO or possibly the European Union require states to destroy surplus small arms and light weapons as a condition of membership.

The \$33 million proposed in the Lugar-Obama bill would quadruple current US government spending for the destruction of small arms and light weapons. The proposed investment under Lugar-Obama would also exceed all US government spending for these purposes "to date," which has been just \$27 million according to a State Department fact sheet on the subject of small arms and light weapons. The State Department's headline for the fact sheet is somewhat misleading, noting only

The \$33 million proposed in the Lugar-Obama bill would quadruple current US government spending for the destruction of small arms and light weapons.

that "US Spent \$27 Million to Destroy Small Arms, Light Weapons." Only later, in the body of the text, does it note, "*To date* [emphasis added] the United States has provided a total of over \$27 million to destroy approximately 900,000 small arms and light weapons and over 80 million pieces of ammunition in 25 countries."

The implication in the text is that the \$27 million was spent in the five years between the 2001 UN conference on small arms and light weapons and the 2006 review conference, an average of just over \$5 million per year. Even so, the US has spent more than any other country for these purposes, suggesting that there is ample room for other developed nations such as members of the European Union to make substantial additional investments in small arms destruction efforts.

As important as stockpile reductions are efforts to secure existing stockpiles so that they are not subject to looting and theft that ends up fueling the illicit market. A majority of nations have inadequate security over existing stocks of small arms and light weapons, a state of affairs that is almost an invitation to raid these stockpiles and use the weapons thus received to promote and sustain conflicts and abuses of human rights.

Crack down on brokers, shippers and arms dealers

The countries that control 90% of the world's arms transfers are increasingly using private companies as arms brokers and shippers. Amnesty International is tracking this emerging phenomenon with concern. Absent improved legal and regulatory frameworks, Amnesty argues that this situation contributes to the "diversion

and easy availability of such arms by those perpetrating serious violations of human rights . . . including those believed to engage in terrorism."

Some of the recommendations put forward by Amnesty include the following:

 All countries should include brokering, transport, and dealing in weaponry in their national laws, including coverage of these activities when engaged in by their own citizens;

- Screening of brokers, shippers, and dealers every two years to determine whether they have violated laws relating to arms exports, trafficking, or money laundering, at which point their licenses should be revoked;

- Annual reports naming all brokers, shippers, and other transporters of arms, including an indication of what type of documentation they are using to legitimate their activities.

The importance of individual countries' having their own strong laws was underscored on June 7, 2006 when Guus Kouwenhoven, a major player in the illicit timber trade, was sentenced to eight years in prison for breaking a UN arms embargo on Liberia. Global Witness, the NGO most involved in researching the trade in conflict diamonds, applauded the verdict as "precedent-setting" and indicated that it should serve as a model for other countries. Incredibly, some of these simple measures do not already exist. Clearly, implementation should make it much harder for terrorists, militias and other non-state groups to acquire diverted arms.

Mark and trace small arms and ammunition

Many of the new small arms and light weapons entering circulation are untraceable. Marking and tracing is a potentially powerful tool for holding countries of origin accountable for their explicit support of illicit arms transfers to non-state groups. At a minimum, such countries can and should be called to account for their lax regulation of their own arms stockpiles, and/or their transfer of small arms to middleman or untrustworthy governments.

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Marking and tracing has received the most support (or, perhaps better put: the least resistance) of any of the measures put forward for the regulation of small arms and light weapons. This is in part because the parties likely to be held responsible are arms dealers or, on occasion, governments in the country of origin. Companies involved in the manufacture of small arms and light weapons would probably be the last on the list, unless they took the risky step of selling directly to the illicit market.

In December 2005 the United Nations General Assembly adopted an "international instrument to enable states to identify and trace, in a timely and reliable manner, illicit small arms and light weapons." The instrument is an important step forward in international efforts to monitor the flow of small arms and light weapons, but it has a number of flaws. First, it is politically rather than legally binding, making it easier for states to decide not to participate in the marking and tracing regime. Second, it lacks clear language regarding the implementation, capacity building, or next steps needed to make the instrument effective. It also contains loopholes such as the exclusion of ammunition from its purview.

Curb arms export financing

The illicit trade in natural resources, including gemstones, precious metals, oil and timber, is an important source of funding for non-state actors. International authorities need to be able to track nations and groups engaged in "arms for resources" swaps, including governments and groups in the areas of origin, and states and organizations that serve as middlemen in these transactions.

One of the most promising and welladvanced efforts to deal with the use of resources to fund violence perpetrated by non-state groups is the Kimberley process on the certification that diamonds sold on the international market are not "conflict diamonds." The process,

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supported by non-governmental organizations like Global Witness and Physicians for Human Rights, aims to produce a distinct system of marking rough diamonds so that their place of origin can be traced, and countries and nonstate actors that are regular sources of conflict diamonds can be boycotted or otherwise regulated. As Global Witness spokesperson Susie Sanders noted in late 2005:

the Kimberley process has taken real steps to stop the trade in conflict diamonds, but the problem has not been solved. Governments must audit all sectors of the diamond trade and take credible action against members of the diamond industry that are known to trade in conflict diamonds.

Promote an arms trade treaty

Because there is currently no international agreement governing the export of conventional armaments - small or large - the arms trade has been described as the "orphan of arms control."

Sarah Margon, the director of Oxfam, is blunt about the need for strict controls on small arms sales: No one but a criminal would knowingly sell a gun to a murderer, yet governments can sell weapons to regimes with a history of human rights violators or to countries where weapons will go to war criminals.

Oxfam, Amnesty International, the International Action Network on Small Arms, and other humanitarian organizations are pushing for an International Arms Trade Treaty that would curb arms sales to human rights abusers and regions of conflict.

The treaty got its start as an initiative of a group of Nobel Laureates led by current Costa Rican president [and EPS Trustee. -ed.] Oscar Arias, and was then picked up by NGOs. Over 50 nations have endorsed a set of "global principles" which continues to be circulated for comment among interested governments and NGOs. The modus operandi for pursuing the treaty will mirror the successful effort to create an international agreement banning the export and deployment of anti-personnel land mines. The land mines treaty was promoted by a "coalition of the willing" - key states that endorsed the treaty outside of the UN's disarmament machinery and then invited other nations to sign on.

Given the unwillingness of many UN member states to even endorse binding measures for the much smaller reforms mentioned earlier in this section, the Arms Trade Treaty is clearly a long-term undertaking.

William Hartung is the Director, and Frida Berrigan the Senior Research Associate, of the Arms Trade Resource Center of the World Policy Institute at New School University. Online at http://www.worldpolicy.org/projects/arms/.



Groundhog Day

James K. Galbraith

Let's see... It's August. Bush is in Crawford on a "working vacation." His polls are in the tank. Congress is in revolt. The economy is going soft. The next elections don't look good. Cheney is off in Wyoming, or wherever he goes. It's 2001. No, it's 2006.

In *The 18th Brumaire of Louis Bonaparte*, Marx reports that "Hegel writes somewhere" that the great events of history tend to occur twice, first as tragedy and then as farce.

On September 11, nineteen hijackers commandeered four airplanes and succeeded in killing some 3,000 people. On August 10, we are told, British authorities upended a suicide-murder plot aimed at destroying twelve airplanes, killing everyone on board including the bombers, possibly with more fatalities than on 9/11. As a senior British police official put it, "This was intended to be mass murder on an unimaginable scale."

From all official statements so far, we are led to believe that August 10 was a highly developed, far-advanced conspiracy, under surveillance for some time, which could have been put into action within just a few days. And perhaps 8/10 really was the biggest thing since 9/11. But then again, perhaps it wasn't. We don't know yet. And it's not too early to ask the questions on which final judgment must depend.

Well, then. Here is a checklist of some things we should shortly be hearing about. Bombs. Chemicals. Detonators. Labs. A testing ground. Airline tickets. Passports. Witnesses. Suspicious neighbors. Suspicious parents. Suspicious friends. Threats. Confessions. Let me spell this out: By definition, you cannot bomb an aircraft unless you have a bomb. In this case, we are told that there were no bombs; rather, the conspirators planned to bring on board the makings of a bomb: chemicals and a detonator. These would be mixed on board.

Exactly what the chemicals were remains unclear. Nitroglycerin has been suggested, but it's too likely to go off on the way to the airport. TATP, made of acetone and peroxide, has been suggested, but there are two problems. One is that the peroxide required is highly concentrated - it's not the 3 percent solution from the drugstore. The other is that acetone is highly volatile. As anyone who flies knows, you can't open a bottle of nail polish remover on an airplane without everyone within twenty feet knowing at once. It's possible to imagine one truly dedicated and competent bomber

Someone lacking a passport can, I think, safely be excluded from the ranks of potential suicide bombers of UK-to-US flights.

pulling this off. But it is impossible to imagine twenty-four untrained people between the ages of 17 and 35 all getting away with the same trick at once.

So, there must have been training. That means there must be a lab, or labs. There must have been trial bombs. There must be various bits and pieces of equipment used to mix the chemicals and set them off. There must be a manual. There must be a testing ground. And each one of the young men under arrest must have been to these places. Interestingly, it must have all happened, too, without a serious accident, injury or death among the conspirators. If so, they are a lot more competent than the Weather Underground ever was, in my day.

Arrests were made at night, catching the culprits at home. Houses have been raided, and are being searched. So far as we know at this point, no bombs have been found. No chemicals. No equipment. No labs. No testing ground. Maybe this will come out later, but it hasn't so far, even though the authorities seem anxious to tell just about everything they know.

Now, in order to get on an airplane, even the most devout suicide terrorist needs a ticket, and these generally must be purchased with money. Apparently, not one ticket had been purchased by the detainees. One little-known feature of airline security (in the United States, anyway) is that people traveling on one-way tickets bought at the last minute get special scrutiny at the gate. Those tickets are also (a lot) more expensive. If you want to pass unnoticed, you will buy your ticket round-trip, in advance, and also save money like every-

> one else. Actually, if you didn't know this already, you're not fit to be let out of the house.

> Further, to get on an international flight from Britain to the United States, in these days of the modern nation-state, you need something else. It's a document called a passport. Apparently, some of the detainees don't have them. Someone lacking a passport can, I think, safely be excluded from the ranks of potential

suicide bombers of UK-to-US flights. They could, of course, have a counterfeit or be operating in a support role - but so far we are not being told of any counterfeit documents or any support operation. And to pass security you would use a different person to carry each chemical you needed. For twelve flights, that's twenty-four people.

As for the suspicious parents, friends and neighbors - it's technically possible that the bombers' security was so excellent that none existed. It's just that, in dealing with young people swept up in a fervor of religious hatred, the odds are extremely low. Of all the Islamic groups, Hezbollah in Lebanon is the only one that maintains effective military security, which it does by isolating its fighters as completely as possible from the civilian population. But these young men were picked up at home; they were well-known and yet apparently suspected by no one at all.

As to threats: A joke going around the Manchester Airport on August 10 was that at least the IRA would remember to call. What's the point of a suicide bombing if no one knows what it's for? The downing of twelve airplanes would be horrific to those on them (including me, as it happened), but

as it happened), but it wouldn't put a dent in Western capitalism. It would have to be part of a much larger, ongoing, unstoppable campaign. Otherwise, why bother? A once-off attack shows the weakness, not the capacity, of the plotters, and in the end it strengthens not them but the governments they attack. After 9/11, terrorists should know this.

Finally, confessions. Twenty-four suspects have been arrested, according to some reports. Nineteen have been named. Happily, the detainees were taken alive. Unlike the man arrested in Pakistan, we may presume (I trust) that they are not being tortured. Therefore, they will have a chance to make an uncoerced statement of

\$1.2 Trillion Mistakes

Kate Cell

In 2003, EPS (then ECAAR) published what remains the first independent analysis of the full costs of the Ballistic Missile Defense system the Bush team proposed during the 2000 presidential campaign. While the research was underway, one Board member told me that the question we were trying to answer was analogous to this: "Someone is building a time machine. No one has ever seen one before. The specs, blueprints, and account books are classified. Now, how much will it cost?"

Despite its inherent difficulties, the project remains one of EPS's great successes. The final estimate - up to \$1.2 *trillion* - is still quoted whenever someone outside the military-industrial complex contemplates the price tag for BMD. Three years after it first appeared the entire 120-page, 1.2 megabyte report is downloaded an average of 35 times a week from the EPS website, despite the fact that the much shorter introduction and executive summary are also available.

As it turns out, BMD appropriations have not accelerated at anything like the speed necessary to implement the full Bush administration program. Spending remains fairly steady at "only" eight to ten billion dollars a year. Though Steve Kosiak of the Center for Strategic and Budgetary Assessments estimates that just one-third of the \$845 billion dollar their intentions in open court. By then the authorities will have found the labs, testing grounds, airline tickets and passports. Credible witnesses too will have emerged. By then the young zealots will have no expectation of acquittal or mercy, and nothing to lose. We may therefore confidently expect them to face the judges and declare exactly what their motives and intentions were. If they do that, I'll eat my hat.

In short: Could this case blow up? Could it turn out to have been an overreaction, a mistake - or even a hoax? Yes, it could, and it wouldn't be the first one, either. I'm not saying it will, necessarily. I'm not accusing the British authorities of

increase in military expenditure since September 11, 2001 pertains to Operations "Iraqi Freedom" or "Enduring Freedom," the wars in Iraq and Afghanistan have clearly imposed some budgetary constraints on missile defense. One bad idea (blaming Saddam Hussein for 9/11, then invading and occupying Iraq) has driven out another (managing the threat of ballistic missiles through the boondoggle of Star Wars).

In January of this year, Linda Bilmes of Harvard's Kennedy School and EPS Trustee Joseph Stiglitz published a paper estimating the full costs of the Iraq war to the US economy at, you guessed it, \$1.2 to \$2 trillion.

Missile defense was my first experience of the mind-boggling number of \$1 trillion. Perhaps by the time the Bilmes/Stiglitz paper came along my ability to respond emotionally to obscenely big numbers had been dulled. When I first heard the \$2 trillion upper bound, I wasn't shocked, nor even surprised. Building a stable democracy out of the fragmented, pseudo-nation of Iraq is much like building a time machine: no one's ever known how to do it, and it is sure to cost a lot more than you'd think.

But the literally hundreds of reporters, politicians, activists, and scholars who have now quoted the Bilmes/Stiglitz estimate *were* surprised and shocked. bad faith. I'm not suggesting the plot was faked - at least, not by them. But dodgy informants and jumpy politicians are an explosive mixture, easily detonated under pressure. Everyone knows that.

EPS Board Chair James K. Galbraith flew from Manchester to Boston on August 10th, 2006, enduring eleven hours without a book. Expect to see him soon in an aisle seat near you.

This article originally appeared in The Nation of August 16, 2006, and is reprinted with the kind permission of the author.

"The Economics of War and Its Aftermath: The Case of Iraq" reckons the war's impact on the price of crude oil at an additional \$5 to \$10 per barrel. This section of the analysis alone has ensured that the Bilmes/Stiglitz findings are part of discussions, debates and elections around the world.

Over the first five years of the Bush administration EPS staff were often told by foundation program officers, political consultants, pollsters, media specialists, etc., that "the trade-off argument" is dead in the political water - the US public does not believe it can pay too high a price for "freedom." But how much intelligence capacity, diplomacy, international educational and cultural exchange, homeland security, renewable energy technology, how much *real* security and freedom could the US have bought for \$2 trillion or more?

In his preface to "The Full Costs of Ballistic Missile Defense," Kenneth Arrow reminded readers that every national security choice has costs and consequences. Recent polls show that people in the US are opening the nation's credit card bill for the Iraq war. They're reckoning the costs and they don't think they got a bargain. In the immortal words of President Bush himself (ghostwriting by The Who): "Fool me once, shame on you. Fool me twice... We can't get fooled again."

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EPS Fall Fundraisers - Save The Dates!

EPS is hosting two fundraisers this fall to help us end our fiscal year in sound shape. This year we have two exciting events in two cities to choose from.

Our fundraising events are characterized by provocative speakers, active and informed discussions, warm in atmospheres, and excellent food. If you plan to be in New York on October 12, or Boston on October 17, please consider joining us.

You Are Invited

Thursday, October 12

An Evening With Ambassador Peter Galbraith and EPS Chair James K. Galbraith

Ambassador Galbraith will give an informal talk on The End of Iraq: Exit Strategies at the Manhattan home of Alan Harper

Requested donation for this event, including wine and hors d'oeuvres, is \$250. A very limited number of places are available for dinner with Ambassador Galbraith and our hosts after the event for an additional contribution of \$500. To request an invitation, please call the office or e-mail theaharvey@epsusa.org.

You Are Invited

Thursday, October 17

Executive Breakfast with Allen Sinai President of Decision Economics, named by USA Today as the top economic forecaster in the US, and EPS Board member.

Dr. Sinai will speak on Seismic Shifts and Big Waves in the Global Economy and Financial Markets 8:00am to 9:30am at the Harvard Club of Boston. Requested donation of \$100. To request an invitation, please call the office or e-mail theaharvey@epsusa.org.

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