



Are We **PREPARED** for
21st CENTURY
WARFARE?

June 17, 2010
Dinner Discussion Highlights



TOFFLER ASSOCIATES®

We discussed the future of warfare and what we must do today to prepare for it.

We are currently in war, terrorists are getting more sophisticated, organizational budgets are being cut, the U.S. continues to have shortfalls in needed expertise, and many of our soldiers are losing their lives each and every day. Due to circumstances, many organizations are focused on day-to-day activities to support the current fight and spend little time on long-term planning. Leaders involved in or directly managing critical defense organizations must dedicate time for thinking outside of the box in order to anticipate, prepare and defeat the enemy's next steps.

We stimulated the discussion by asking: “**How do we position ourselves to respond effectively to future warfare?**”



This is a summary report of our discussion on Future Warfare. It is not a transcript. It is a “rendering” that condenses some areas of discussion, eliminates some that were repetitive, expands some, and recombines others to illuminate themes that we believe emerged. Any errors in the interpretation or nuances are ours. As is our custom, we posed questions to spark the conversation:

- *How do we position ourselves to respond effectively to future warfare?*
- *What are the significant changes that are going to change the nature of warfare as we go deeper into this century?*
- *What is your opinion about the major factors that are going to change 21st century warfare?*

We did not exhaust discussion on any of the questions or on the other issues raised, as participants shared a wide range of views on multiple aspects of future warfare and on what the U.S. should do to improve its posture. Over the course of the evening, several primary themes emerged:

- Irregular warfare is the “wrong word” - it may be irregular for us, but it's certainly not irregular for our adversaries.
- The U.S. tends to focus on right of boom vs. left of boom.
- The U.S. national, security, grand strategies and security architecture require greater attention.
- The U.S. rules, laws, and policies are outdated and irrelevant to the war today.
- The U.S. must acknowledge that we are fighting a war with servicemen and women who span a number of generations; therefore, we must leverage the skills and creativity from various generations to identify new ways of planning, training and executing operations.
- Soldiers need training in critical thinking to understand and predict adversaries’ tactics and strategies.
- The U.S. needs to distinguish between when it is in war, or when it is in aggressive competition with another nation.



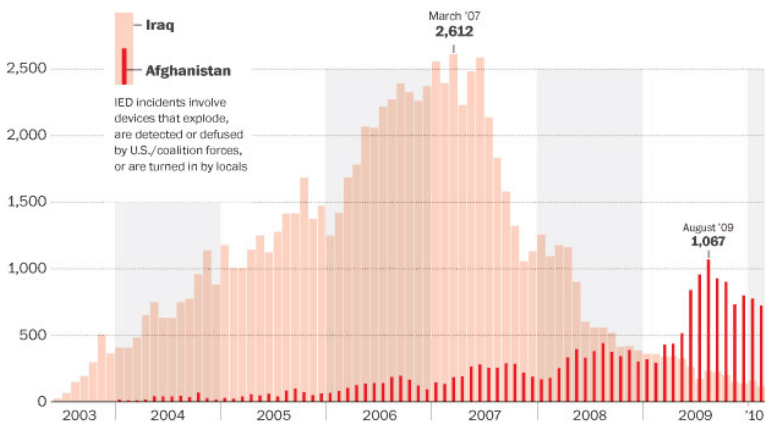
- The U.S. must eliminate its linear, nation-to-nation thinking, and instead, develop a holistic view of the world.
- The U.S. needs to develop technologies across the entire spectrum of warfare to deal with a variety of future threats that cannot adequately be predicted - from high-tech to low-tech and the hybrids in between.
- Soldiers will have to rely more on their human and personal skills vs. system and technological skills as we continue in this current war.

“Warfare will allow for power and influence to be generated in a way that the U.S. is not comfortable with or that we don’t understand, but there’s nothing irregular about it. This is regular warfare.”

As we opened the discussion for the evening, we agreed that the current warfare is neither irregular nor new. We agreed that the U.S. tends to think current modes of warfare are irregular because we look at war through our own eyes and not through the lenses of our adversaries. On the contrary, some observed that our adversaries are only repeating behaviors and tactics from previous wars. However, we in the U.S. think these tactics are new because we do not recognize that these contemporary tactics and weapons are simply variations on old themes. For example, the booby traps and landmines used in previous wars are, in fact, similar to some of the improvised explosive devices (IEDs) that are seen in today’s war. Although these tactics/devices have different names, they are very similar in their impact and effect. Therefore, the U.S. needs to stop viewing the current war as new and identify what we can learn from the past.

Though the U.S. is working hard to solve the IED problem and is implementing solutions to counter such events, there was consensus that the nature of warfare will need more of a strategic construct (left of boom) vs. a tactical construct (right of boom), where we currently dedicate most of our efforts, time, and money. As seen in the current war today, our adversaries have obtained a huge advantage by leveraging IEDs which are confounding us and causing thousands of casualties. The month of June, 2010, with 60 deaths, was the deadliest month in Afghanistan this year. In addition, statistics continue to show that IEDs are decreasing in Iraq and are increasing tremendously in Afghanistan. Though many of us felt we are getting smarter as the war moves from Iraq to Afghanistan, the group agreed that the U.S. continues to have a reactive response vs. a strategic response to this problem.





While the use of homemade bombs, or IEDs, has markedly decreased in Iraq, their use in Afghanistan is soaring. The total number of IED incidents in Iraq and Afghanistan since June 2003. – Source Joint Improvised Explosive Device Defeat Organization | The Washington Post - March 18, 2010

There was agreement that the U.S. national, security, grand strategies and security architecture require greater attention to shift the U.S. thinking from left to right of the boom. Currently, the nation's national strategic planning is not conducive to supporting the fight that we are in, nor the ones that we may encounter in the future. As Eisenhower once said, "A plan is nothing; but planning is everything." However, many felt that the U.S. is lacking in strategic leadership. There is still a lack of understanding of our grand, national and policy strategies; and many senior leaders who were hired to think strategically tend to get very tactical vs. strategic in developing mission plans. The U.S. has yet to figure out how to do long-term planning, take risks, allocate resources between economic and defense sectors, implement effective human capital strategies, and determine appropriate roles and exercises to conduct with interagency members and stakeholders. Ultimately, we have to figure out how to think from a strategic and policy level, and then allow operational commanders, tactical planners, and stakeholders execute on immediate and long-term goals.

There was also discussion on our outdated rules, laws, and processes that are inhibiting our progress in executing the current war. Our participants believed that these structures were modeled based on the conditions of World War II, which are no longer relevant or effective today. Currently, these U.S. structures focus on nation-to-

nation and boundary-to-boundary limitations. However, adversaries do not play by these same constructs, nor do they confine themselves between sectors, boundaries, and/or nations. Updating this structure to more accurately reflect today's environment will assist the U.S. in being more flexible, agile, and capable in responding to adversaries.

As the U.S. improves its strategies and structures, it must also acknowledge that we are fighting a war with servicemen and women who span a number of generations. Since multiple generations are fighting and gaining experience, all of these perspectives are valuable for shaping the future. Thus the adage, "Wars are fought by young men and led by old fools" may no longer apply. Many of the participants felt that there are quite a few senior leaders directing this fight who have outdated views of the world and warfare; in reality, today's young men and women have the experience and knowledge to lead the military. The U.S. needs more leaders from the younger generation to develop new ways of conducting operations and strategic planning. Some felt that the military is taking a better approach to incorporate views from the younger generation by restructuring itself to operate on a flat vs. hierarchical configuration that leverages creativity, technological experience, innovation, and future perspectives. In addition, there was agreement on the need to further involve the younger generations in more strategic planning, doctrine, training, and red-teaming exercises.

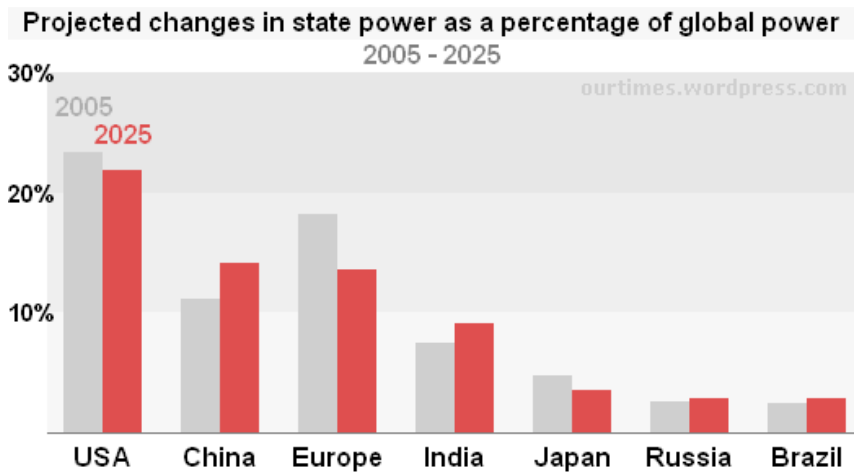
"We look at the world through a Western view. But perhaps the edge is in the educating of the 18 year old to recognize the weakness and strengths of the enemy, then stripping that away with whatever we have."

We agreed that soldiers need training in critical thinking to better understand our adversaries' strategies and tactics. Someone said the War College teaches students "what to think and not how to think." The group agreed that soldiers need more training in challenging assumptions, cultural awareness, devil's advocacy, managing perceptions, and the art of deception. This training will be essential in helping soldiers assess, adjust, and re-adjust to situations that are new, unexpected, and unique. In addition, as soldiers experience new and unique situations, implementation of a better system is needed for sharing lessons learned to ensure future deploying soldiers are prepared and trained to execute their designated mission.

On a separate note, the U.S. does not have a clear understanding of how to determine when we are at war vs. when we are in aggressive competition with another country. When one guest asked: "How does the U.S. determine when we are at war?" and "What is the process for determining when we go into war?" Many of us did not have an answer. Some questioned if the US is at war with China, or if it is only experiencing



pure competition. Most of us believed that we are at war with China due to its aggressiveness, investments, and recent moves in countries such as South America, Africa, and Afghanistan. We also agreed that, in addition to China, we will have to be more conscious of other nations who may be at war with us. As economic hardships continue, competing nations will look for ways to attack our economic structures, impact our way of life, and recruit other countries to join them in conquering U.S. missions. Therefore, the U.S. will need to be aware of current and emerging powers to understand the concerns and implications of those countries that are rising vs. those countries that are falling.



Source: Global Trends 2025, U.S. National Intelligence Council, 2008

By 2025, the United States will find itself in the position of being one of a number of important actors on the world stage, albeit still the most powerful one. The relative political and economic clout of many countries will shift by 2025, according to an International Futures model measuring GDP, defense spending, population, and technology for individual states.

The U.S. must eliminate its linear, nation-to-nation thinking and develop a holistic view of the world. We must consider the rippling effects of situations happening around us. As other areas of the world experience tragedy or downfalls, we have to assess the impacts those events could have on us, our allies, neutral countries, and our enemies. For example, many are demonizing British Petroleum (BP) for the oil spill in the Gulf of Mexico. However, BP is one of the biggest supporters of one of our

allies, Great Britain. If we bankrupt BP, we could cripple Britain's economy and damage its collaborations with NATO.

There was also consensus that we still need core technologies across the entire spectrum of warfare to deal with a variety of threats, from high-tech to low-tech and the hybrids in between. Most agreed that the systems and technology being used in today's war includes vintage 1947 equipment, but does not include the capacity required for soldiers on the ground to operate and conduct system-to-system connectivity in various environments. Decision makers need to balance the technology we currently have with a better understanding of the situations in which we apply them.

Soldiers will also have to rely more on their human and personal skills vs. system and technological skills. Some believed that technology is an enabler, but it is no longer the driving force in today's fight, which is becoming more human and population centric. As the war continues to be more focused on humans and populations, technology actually distances us from people, taking us out of touch with those requiring the shaping of hearts and minds. Therefore, it is important that soldiers embrace their human and personal skills, including the ability to translate, build relationships, understand cultural cues, interrelate with people one-on-one as well as at the small-group level. If the trends indicate correctly that we're going to deal more with individual groups, smaller groups, and urban environments, our soldiers will need to implement cultural one-on-one and know when to leverage technology to support their missions.

As we wrapped up the evening's discussion, we all felt that the U.S. has many improvements to make and highlighted immediate areas of focus:

- The U.S.'s grand and national strategies should be re-crafted to focus on longer-term objectives and strategies.
- Strategic plans should be clearly outlined, including appropriate roles and responsibilities for interagency and relevant stakeholders.
- The U.S. should hire strategic thinkers to develop more strategic plans vs. tactical plans that tend to be focused on near-term activities.
- The U.S. needs to eliminate nation-to-nation thinking and begin to create rules, laws, and processes that allow greater flexibility and agility.
- The U.S. needs to take smarter, more calculated risks.



- The U.S. should begin to focus more on how an adversary can exploit our homeland vs. placing all of its attention on external borders.
- Training must include more of the human and personal skills vs. the current emphasis on system and technological skills.
- The U.S. should focus on obtaining an asymmetric advantage to identify characters' strengths/weaknesses and develop strategies to conquer them.
- The U.S. should continue to incorporate the creativity and innovation of the younger generation in doctrine, planning and strategic efforts.

Conclusion

Most of the attendees left the dinner feeling confident in the ability of the U.S. to execute and win the wars against Iraq and Afghanistan. We agreed that the nature of warfare will stay the same, but that the character of warfare will continue to change. As we move into the 21st century, we will need to rely more on human and strategic skills vs. system and technological skills. Therefore, our soldiers will require greater knowledge of the development and expansion of new and emerging networks – to better understand the roles various characters may play, to identify their strengths and weaknesses, and to prepare the employment of asymmetric advantages to conquer them. Although the group felt that the U.S. has a lot of improvements to make, there was general consensus that we will come out of this war with greater capability and creativity, along with better technological solutions.



DINNER PARTICIPANTS IN ALPHABETICAL ORDER

Mr. Bruce Braun, Director, National Academies Board of Army Science and Technology, Division of Engineering and Physical Sciences

Mr. James (Jim) Brooks, Associate Director, Air Force Quadrennial Defense Review, Office of the Air Force Vice Chief of Staff, Headquarters U.S. Air Force

Mr. James Carafano, Deputy Director, Kathryn and Shelby Cullom Davis Institute for International Studies and Director, Douglas and Sarah Allison Center for Foreign Policy Studies, The Heritage Foundation

General James Cartwright, Vice Chairman, Joint Chiefs of Staff

Lieutenant General David Deptula, Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance, U.S. Air Force

Mr. Mortimer (Mort) Downey, Director, Washington Metropolitan Area Transit Authority Board

Major General Barbara Fast (U.S. Army, Ret.), Vice President, Cyber and Information Solutions, Intelligence and Security Systems (I&SS), Network and Space Systems, The Boeing Company

Major General David Fastabend (U.S. Army, Ret.), Director, Strategic Initiatives, ITT Defense

Mr. Joshua Hartman, Senior Fellow, Technology and Public Policy Program, Center for Strategic and International Studies (CSIS)

Mr. Michael Isherwood, Director, Air Forces & Senior Analyst, Northrop Grumman Analysis Center Northrop Grumman Corporation

Colonel Natalie Jacaruso, Military Deputy/Chief of Staff, DOD Biometrics Identity Management Agency (BIMA)



Dr. R. Scott Moore, Deputy Director, Center for Complex Operations, National Defense University

The Honorable William Navas, Jr., Executive Director,
National Security Professional Development Integration Office

Mr. Joseph (Joe) Purser, Director, Joint Futures Group, J59, USJFCOM

Mr. John (J.D.) Williams, Director for Research, Defense Intelligence Agency



TOFFLER ASSOCIATES®

Toffler Associates: Our Vision and Purpose

Toffler Associates is a dynamic, innovative advisory firm that helps public- and private-sector organizations create bigger, more successful futures through transformation design. We serve as a catalyst for change for clients with tough problems to solve.

These problems are complex, presenting in sometimes unexpected ways. They're ambiguous, unpredictable and most often times non-linear. But their resolution can transform the behavior of individuals and societies, along with the infrastructures, organizations and systems that exist to serve them.

We work with public-sector clients, such as federal agencies, the intelligence community, associations and educational institutions, to develop and implement ways to use resources more effectively and to build lasting public trust. We work with private-sector clients, like those in the transportation, aerospace, chemical, advanced materials, information technology and defense markets, to create and execute strategies that drive top-line growth.

Toffler Associates is different because we start in the future and look back to see what is really driving change around us. Our model for understanding change and its implications is a legacy passed to the firm by our founders, world-renowned futurists Alvin and Heidi Toffler. Our approach is a contemporary reflection of their efforts, combining forward-looking methodologies, in-depth industry knowledge and powerful insights gained through a network of global experts to turn analysis into action. In doing so, we help clients create enduring success by better understanding the forces driving change around them and by preparing them for what the future will demand.

We find daily inspiration in working with commercial enterprises and government agencies that are creating something that really matters to people, clients who are trying to make a difference in all of our lives. Our purpose is to help them achieve that. It is the passion that unites our firm as one community.



TOFFLER ASSOCIATES – THE PARTICIPANTS

MR. WARD JONES

Toffler Associates
40 Beach Street, 302 Harbor's Point
Manchester, MA 01944
Phone: 703.994.8352
Email: wjones@toffler.com

Mr. Ward Jones is a Principal with Toffler Associates. He has concentrated experience in intelligence, defense acquisitions, and homeland security developed through 15 years' experience in the commercial and government sectors. He advises executives in the private and public sector on evolving mission areas, emerging markets, organizational change, and process improvement. He has guided numerous clients to new market opportunities through strategic planning, market assessments, competitive analysis, and voice-of-the-customer activities. Prior to joining Toffler Associates, he was an intelligence and infantry officer for the Marine Corps, a counter-terrorism consultant to the U.S. State Department, and an IT consultant to Fortune 500 companies. He received his Bachelor of Arts degree from the United States Naval Academy with a concentration in English. He has completed executive education at the University of Pennsylvania's Wharton Business School.



MR. AARON SCHULMAN

Toffler Associates
40 Beach Street, 302 Harbor's Point
Manchester, MA 01944
Phone: 703.262.0070
Email: aschulman@toffler.com

Mr. Aaron Schulman is a Partner in Toffler Associates. He has over 24 years of progressive and diversified consulting experience encompassing the areas of strategy, organizational change, and futures analysis. He works within the national security and government sector in Toffler Associates in the area of complex warfare and advises senior leaders in their transformation and growth strategies. His clients include the U.S. intelligence agencies, the Joint IED Defeat Organization (JIEDDO), other Department of Defense organizations, civilian government agencies, and commercial sector clients. Mr. Schulman received his MA in consulting psychology from Harvard University, and his BA in psychology from The American University. He has completed Executive Education at Northwestern University's Kellogg School of Management, and at the University of Pennsylvania's Wharton Business School.



TOFFLER ASSOCIATES®

MS. RAYNEISHA WATSON

Toffler Associates

40 Beach Street, 302 Harbor's Point

Manchester, MA 01944

Phone: 301.627.1518

Email: rwatson@toffler.com

Ms. Rayneisha A. Watson is a native of Washington, DC. She received a Bachelors of Science degree in biology from Virginia Union University, a Masters degree in microbiology from Thomas Jefferson University, and a Masters of business administration degree in consulting and entrepreneurship at American University. Ms. Watson has held internships, scientific and managerial positions within academia, government, and biodefense institutions. In these positions she worked on projects relating to cancer, cardiovascular, kidney, nutrition, pharmacology, virology, and biodefense research. Currently, Ms. Watson is a strategic consultant with Toffler Associates helping companies in defense, intelligence, and government achieve their business, corporate, and strategic goals.



TOFFLER ASSOCIATES®

MS. DEBORAH WESTPHAL

Toffler Associates
40 Beach Street, 302 Harbor's Point
Manchester, MA 01944
Phone: 406.563.5250
Email: dwestphal@toffler.com

The Toffler Associates team is headed by Deborah Westphal who has served as our managing partner since 2007. Ms. Westphal advises senior executives in the public and private sectors on strategy, growth and innovation. Using Toffler Associates' unique approach to strategy consulting, she helps those organizations understand the drivers changing their industry and the world and identify the best course of action to create enduring success.

While she has a focused specialty in the aerospace industry, Westphal also has expertise in the materials, technology, transportation, security, telecommunications and electronics sectors. Westphal served as a civilian in the U.S. Air Force for 13 years.

Ms. Westphal earned a bachelor's degree in electrical engineering from the University of New Mexico and a master's degree in business administration from Webster University. In addition, she has completed executive education coursework at Harvard Business School and at the University of Pennsylvania's Wharton Business School.



HEADQUARTERS

302 Harbor's Point
40 Beach Street
Manchester, MA 01944
Phone: 978-526-2444
Facsimile: 978-526-2445

NATIONAL CAPITOL REGION OFFICE

Reston, VA 20191
Phone: 703-674-5480
Facsimile: 703-674-5494

TofflerAssociates@toffler.com



TOFFLER ASSOCIATES®