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ECONOMICS AND NATIONAL SECURITY: THE CASE OF CHINA

By LTC Edward L. Hughes and Dr. Kent H. ButtsNational Security Issues Branch

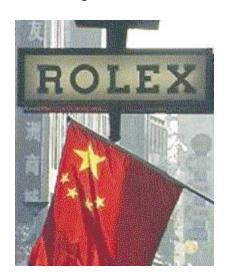
The United States Army War College's Center for Strategic Leadership, the National Intelligence Council, the U.S. Pacific Command, and The Brookings Institution's Center for Northeast Asian Policy Studies cosponsored a conference for selected invitees entitled, "Economics and National Security: The Case of China." The conference was conducted at the Collins Center, Carlisle Barracks, Pennsylvania on November 27th and 28th, 2001.

The purpose of the conference was to explore the national security dimensions of the U.S.-China economic relationship and identify possible roles for the economic element of national power in formulating policy options. Specifically, senior miliadministration, congressional, academic, private sector, interagency, and donor organization subject matter experts examined the linkage between economics and national security, the military implications of China's expanding trade relationships, China's energy development and environmental policies, the role of economic sanctions and export controls, and the role of economic policy in U.S. national security.

As trade between the two countries has increased and China has become part of the world economy, China has made incremental changes in its political and economic systems. Does economic engagement positively influence Chinese leadership? Yes-and the resultant incremental changes in institutions are establishing the foundation for a more stable political and economic system. Will this lead to either democracy or a level of human rights respect that silences foreign critics and isolates U.S. China policy from acrimonious debate? Probably notmoreover, the issues of technology transfer and Chinese trade policy will remain contentious and subject to U.S. domestic variables.

Other security issues abound. China's growing trade empire shift regional allegiances and influence U.S. Asia-Pacific alliances? They will. Is the People's Liberation Army (PLA) benefiting disproportionately from the economic benefits of China's trade? No; although the PLA and defense sector will modernize, China's priority remains its economy, and the PLA's role in the business sector has been substantially reduced. Moreover, it is unlikely that China's expanding trade network will provide the justification for military intervention or the development of an expeditionary military force. As China's economy grows, energy demand will keep pace. Most of its energy imports will originate in the Persian Gulf. China's strategy of petroleum concession ownership creates the potential for geopolitical conflict in areas of long-standing U.S. security interests. Environmental factors are also important. Economic growth will increase the problems associated with water shortages in the Northeast. China will continue to struggle with the domestic and international pollution associated with its growing number of coal-fired power plants.

Given the interplay of these strategic factors, there is great potential for using the economic element of power proactively to achieve an end state of an economically and politically stable China that is willing to accept a continual U.S. presence in the Asia Pacific region.



A SPACE AND MISSILE DEFENSE SECURITY WORKSHOP

By Mr. Ritchie Dion
Operations and Gaming Division

The Center for Strategic Leadership conducted a classified workshop entitled *Defending the Defender- Keeping the Shield Strong* from 26 to 28 November 2001 at the Collins Center. The workshop included over thirty-five subject matter experts from both the federal government and the private sector.

The purpose of the workshop was to focus on developing innovative, out-of-the-box approaches to protecting our present and future space and missile defense systems from unrestricted/asymmetric warfare threats. Workshop participants identified vulnerabilities and the emerging means that may threaten the National Missile Defense (NMD) and Theater Missile Defense (TMD) portions of the Integrated Missile Defense (IMD). After identifying these present and future vulnerabilities and threats, participants proposed solutions to reduce and restrict the vulnerabilities as well as to deter and defeat the identified threats.

Three distinguished speakers, Mr. George W. Criss III from Booz-Allen & Hamilton, Mr. John Edwards from DIA, and Mr. Paul Pattak from the Byron Group, Ltd., opened the conference with presentations that focused on future security threats to an integrated missile defense system. LTG Edward G. Anderson III, Deputy Commander-in-Chief, U.S. Space Command,





provided insightful presentations as the dinner speaker and at the beginning of the workshop.

A major conclusion from the workshop is that threats to the IMD systems will increase with the proliferation of relatively low-cost missiles and the increasing sophistication of potential adversaries. The workshop also concluded that in order to safeguard our missile defense forces from asymmetric threats we must focus on integrated, layered networks and on physical defenses that weave together the full range of federal, state, and local assets in both public and industrial areas. Other conclusions are that we must fully involve our allies in all facets of missile defense protection operations and that we must remain vigilant in our concern about physical attacks and pay particular attention to public opinion and information operations. Finally, the key to our ultimate success will be continuous research, development, testing, and evaluation of IMD defensive capabilities and procedures against the evolving multi-spectrum capabilities of our adversaries.

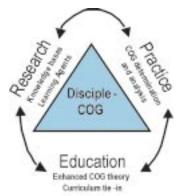
INSTRUCTABLE AGENTS FOR STRATEGIC CENTER OF GRAVITY ANALYSIS

By Professor William C. Cleckner Science and Technology Division

How can the ever-increasing power of artificial intelligence be used to assist strategic leaders with some of their most difficult challenges? The Science and Technology Division of CSL, in cooperation with George Mason University, is researching one option, the use of instructable agents, computer programs that can perceive, reason, and act according to how they have been "trained" by their developers. For this research, the

strategic challenge is determining centers of gravity (COG).

Since June 2000, the George Mason University Learning Agents Laboratory (LALAB) and the Center for Strategic Leadership, with support from the Defense Advanced Research Projects Agency (DARPA), the Air Force Office of Scientific Research (AFOSR), and the U.S. Army, have been conducting joint basic and experimental research on the development of instructable agents for strategic center of gravity analysis. This research has resulted in the development of an instructable agent, called Disciple, that can identify center of gravity candidates for a strategic theater of war scenario.



The research has multiple, complementary objectives. One objective is to develop the technology to enable subject matter experts (SME), including those who do not have computer science or artificial intelligence experience, to develop intelligent agents. Beginning as a pre-configured technology "shell," the instructable agent is developed and "trained" by the SME, incorporating the SME's problem-solving expertise. Such agents can then be used as intelligent decision-making assistants or as tutoring systems. A second objective is to apply this technology to the problems of center of gravity analysis: what is the strategic center of gravity and how can it best be influenced to achieve strategic goals? This objective aims at both testing of the developed technology and at developing a practical methodology for solving the COG problem. Finally, the third objective is to use the resultant technology and methodology in the corresponding courses of the Army War College, providing students hands-on experience with the latest knowledge-based tools.

During the Academic Year 2000/2001, Disciple was used in a sequence of two

courses: Case Studies in Center of Gravity Analysis and Military Applications of Artificial Intelligence. In the first course, students used Disciple to model several strategic scenarios (Malaya 1941-42, Leyte 1944, Inchon 1950, Vietnam 1968-75, Grenada 1983, Okinawa 1945, Falklands 1982, Panama 1989, Somalia 1992-94, and Sicily 1943). For each scenario, Disciple generated a report describing the scenario and a formal computer representation (an object ontology) of the scenario. During the second course, students used these reports and computer representations to train personal copies of the Disciple agents to identify possible strategic centers of gravity. In addition to the experimentation performed in each course, the second course included a final comprehensive experiment during which the students modeled a previously unseen scenario (the U.S. invasion of Okinawa in 1945) and trained a personal Disciple agent to identify strategic center of gravity candidates based on that scenario.

This research partnership continues during the 2001/2002 Academic Year with three objectives: 1) the development of a more powerful version of the Disciple-RKF/COG instructable agent that addresses the identified limitations of the current version; 2) the extension of the practical COG analysis methodology to cover more of this domain; and 3) the use of the new research results in Army War College courses.

ARMY RESOURCE PLANNING CONFERENCE 2001

By COL Dennis Murphy

Director, Operations and Gaming Division

The Center for Strategic Leadership hosted the Army Resource Planning Conference from 1 to 5 October 2001 at Collins Hall. The Army's Deputy Chief of Staff for Operations, Plans and Strategy sponsored the conference. The purpose of the event was to plan the Army's strategy to resource the global war against terrorism.

Over one hundred key officers from the Army and Secretariat staff and from throughout the Army's major commands and Army service component commands participated. Over seventy War College personnel, to include students, staff, faculty, and soldiers, supported the event.

Mid-point and final briefings were provided on site and by video teleconference to senior Army leaders during the course of the conference.

The event resulted in a series of taskers to subordinate Army commands, and it provided the background and information to allow the Army to effectively and synergistically integrate their support to the ongoing national effort to combat terrorism.



78TH DIVISION LEADERSHIP CONFERENCE

By LTC Mike MacIvor

Department of the Army Support Branch

In December, the senior leadership of the 78th Division held a two-day conference at Collins Hall to develop a strategic "look ahead" for their division.

The 78th Division provides training assistance and support to Reserve Component units, provides command and staff training exercises through its simulations brigade, and discharges other missions as directed by the First Army to enhance the combat readiness of Reserve Component soldiers and units. On order, the division coordinates and synchronizes mobilization assistance and support to RC units within its area of responsibility.

The Division Commander, MG James R. Helmly, with his division staff and his bricommanders and command sergeants major, focused primarily on the division's role in training Reserve Component units and developed recommendations aimed at improving the quality of support provided to these organizations under the FORSCOM TRAINING SUPPORT XXI doctrine. LTG Inge, Commanding General, 1st CONUSA, provided remarks and guidance at the opening on the first day.

The Division leadership also discussed potential new roles under the Homeland Security umbrella that dovetail with their existing Disaster Control Operations roles. Much of the discussion centered on the impact that September 11, 2001 had on the subordinate brigades and on what new roles and missions could be expected due to the added emphasis on the protection of the continental United States.

The U.S. Army War College hosted the conference from 6 to 7 December. COL Dennis Murphy and LTC Michael MacIvor, both from CSL's Operations and Gaming Division, served as the conference facilitators. The 78th Staff will take the products developed from conference and construct a five-year campaign plan for the Division.

INTERNATIONAL FELLOWS COALITON BUILDING EXERCISE 2001

By COL Eugene L. Thompson

Joint and Multinational Issues Branch

From 7-8 November, the Center for Strategic Leadership conducted the International Fellows Coalition Building Exercise 2001. This exercise is part of the core curriculum for the International Fellows of the U.S. Army War College Class of 2002.

The exercise was divided into two parts. The first part consisted of training on negotiating skills. The second part involved a scenario-driven negotiations exercise focused on coalition building. The forty-two International Fellows were divided into five teams representing the Ministries of Defense of their assigned nations. A U.S. expert in the region served as a mentor for each team. A control team provided the scenario drivers and played other regional and international actors.



The game, set in 2013, focused on building a coalition to respond to an unstable situation in Southeast Asia. The teams had to formulate a strategy to deal with instability and to engage in strategic coalition building to allow a U.S.-led force to enter the region on a peacekeeping mission. In addition to coalition building, issues such as relative contributions, command and control, timelines, routes,



and logistics were addressed. The U.S. contribution to the coalition was based on the U.S. Army's proposed Objective Force; this served to introduce the International Fellows to the principles, capabilities, and implications for the employment of that force.

In addition to the International Fellows, the staff of the Center for Strategic Leadership and the U.S. Army War College, several outside experts participated in the exercise. These experts included two retired U.S. ambassadors, as well as personnel from the U.S. Army Staff

They served as subject matter experts in the region and advised the International Fellows on the politics, militaries, economies, and cultures of the regional actors.

TITLE 10 GOLDWATER-NICHOLS ACT ROUNDTABLE

By James Kievit

Department of the Army Support Branch

As part of its Joint and Multi-National Initiatives Program, the Center for Strategic Leadership conducts annual Title 10-Goldwater-Nichols Act (GNA) roundtables or workshops to provide a forum specifically designed to bring together selected senior military leaders who previously held positions of high responsibility within the DOD to examine critically the statutory Title 10 responsibilities of the services in the post-Department of Defense Reorganization Act of 1986 (Goldwater-Nichols Act or GNA) environment.

This year's two-day roundtable, conducted 6-7 November 2001, focused on identifying issues associated with the Department of Defense's potential roles and responsibilities in the "War on Terrorism." Distinguished roundtable participants this year included Admiral (USN, Ret) Harry D. Train II, General (USA, Ret) Peter J. Schoomaker, General (USAF, Ret) Michael P. C. Carns, Lieutenant General (USA, Ret) William M. Steele, and Major General (USANG, Ret) John R. Groves, Jr. Following a dinner hosted by MG and Mrs. Ivany at the Commandant's quarters on the first evening, three sessions of thoughtful and spirited dialogue filled the following day.

The first session focused on the authority, accountability, and responsibilities of the Department of Defense regional combatant commanders in the post-September 11th security environment. The second session focused on the organizational requirements and command/control structure necessary to address the burgeoning Homeland Defense/Security mission. The third session provided the opportunity for these distinguished officers to develop an outline of a recommended specific National Military Strategy to address the current war on terrorist organizations of global reach. In compliance with the College's non-attribution policy, specifics of the roundtable discussions cannot be included in this article, but insights from this year's roundtable will certainly be incorporated into current and future Center for Strategic Leadership and U.S. Army War College studies and exercises, including, in particular, the resident students' Strategic Crisis Exercise 2002 scheduled for 12-25 March.

This publication and other CSL publications can be found online at http://www.carlisle.army.mil/usacsl/index.asp.

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U.S. ARMY WAR COLLEGE 650 Wright Avenue Carlisle, PA 17013-5049