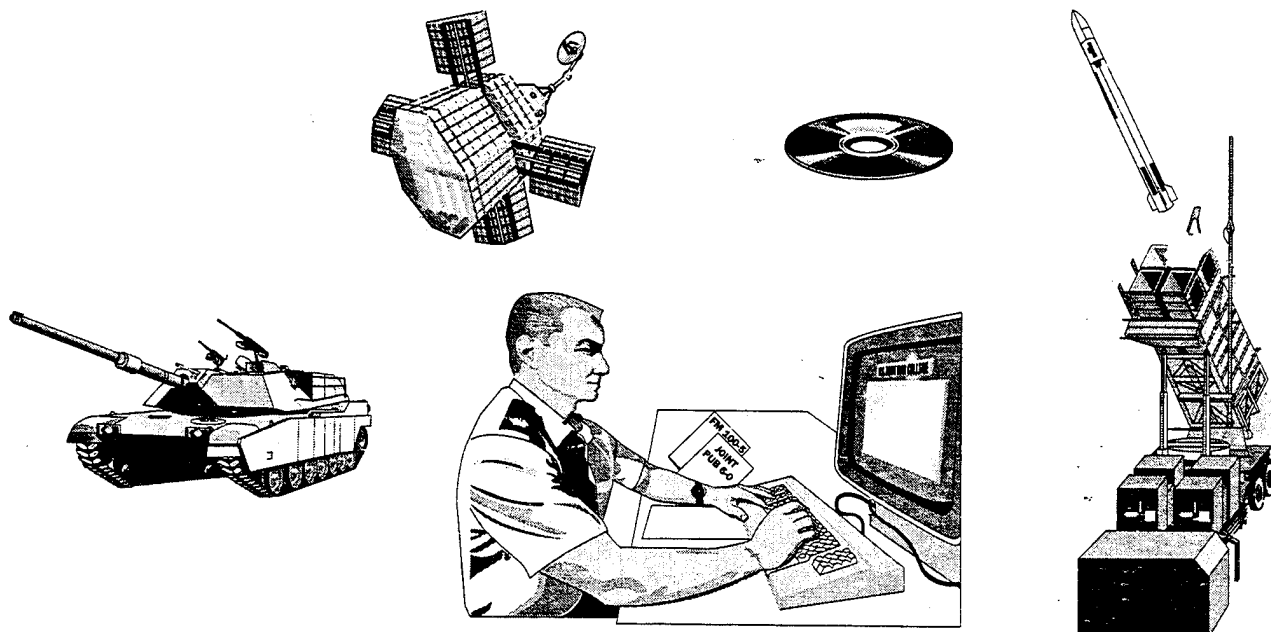# REVOLUTION IN MILITARY AFFAIRS

A SELECTED BIBLIOGRAPHY

"A Revolution in Military Affairs is a major change in the nature of warfare, brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational and organizational concepts, fundamentally alters the character and conduct of war. The Revolution in Military Affairs consists of four new warfare areas: Information Warfare, Precision Strike, Dominating Maneuver, and Space Warfare."

–Program for Joint Education (PJE): Academic Year 1996. U.S. Army War College, Carlisle Barracks, PA.

U. S. Army War College Library

May 1996

Preface

The Revolution in Military Affairs is a special theme at the U.S. Army War College (USAWC). Developed in support of this theme, the following bibliography reflects books, documents, and periodical articles in the collection of the USAWC Library. The first part of the bibliography deals with both general and specific aspects of the Revolution, while the second part deals especially with Information Warfare. Information is a continuous thread interwoven throughout the concept of the Revolution.

With several notable exceptions, the materials identified in this bibliography are dated 1993 to the present. For your convenience, we have added our call numbers at the end of each book and document entry. Please keep in mind that call numbers may vary from library to library.

This bibliography is also available electronically. USAWC faculty, staff, and students with access to the USAWC's Local Area Network will find it on the Library's Bulletin Board. Internet users can reach it through our Library's home page (URL: http://carlisle-www. army.mil/library/).

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<div align="right">Jane E. Gibish, compiler</div>

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CONCEPT, ANALYSIS, AND FOCUSED ASPECTS

BOOKS AND DOCUMENTS

Alcala, Raoul H. "Guiding Principles for Revolution, Evolution, and Continuity in Military Affairs," in Whither the RMA: Two Perspectives on Tomorrow's Army, by Paul J. Bracken and Raoul H. Alcala, 15-46. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 22 July 1994. 46pp. (U413 .A66B72 1994)

Barnett, Jeffery R. Future War: An Assessment of Aerospace Campaigns in 2010. Maxwell Air Force Base: Air University Press, 1996. 169pp. (UG635.3 B37 1996)

Bracken, Paul J. "Future Directions for the Army," in Whither the RMA: Two Perspectives on Tomorrow's Army, by Paul J. Bracken and Raoul H. Alcala, 1-14. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 22 July 1994. 46pp. (U413 .A66B72 1994)

Cooper, Jeffrey R. Another View of the Revolution in Military Affairs. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 15 July 1994. 46pp. (U413 .A66C66 1994)

Csuti, Robin L. An Examination of the Current Revolution in Soviet Military Affairs. Thesis. Monterey: U.S. Naval Postgraduate School, March 1988. 72pp. (V425 .U5 TH C78)

FitzGerald, Mary C. Marshall Ogarkov and the New Revolution in Soviet Military Affairs. Alexandria: Center for Naval Analyses, January 1987. 25pp. (UA770 .F547 1987)

FitzGerald, Mary C. The New Revolution in Russian Military Affairs. London: Royal United Services Institute for Defence Studies, 1994. 76pp. (UA770 .F38 1994)

Gruner, Glenn A. The Military Revolution: Can Corps Deep Operations Now Independently Achieve Battle Objectives? Fort Leavenworth: U.S. Army Command and General Staff College, School of Advanced Military Studies, 1992. 48pp. (U415 .A42 93 G68)

Guilmartin, John F., Jr. "Technology and Strategy: What Are the Limits?", in Two Historians in Technology and War, by Michael Howard and John F. Guilmartin, Jr., 11-46. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 20 July 1994. 46pp. (U413 .A66H69 1994)

Hoffman, Bruce. Responding to Terrorism Across the Technological Spectrum. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 15 July 1994. 32pp. (U413 .A66H64 1994)

Howard, Michael. "How Much Can Technology Change Warfare?", in Two Historians in Technology and War, by Michael Howard and John F. Guilmartin, Jr., 1-10. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 20 July 1994. 46pp. (U413 .A66H69 1994)

Jablonsky, David. The Owl of Minerva Flies at Twilight: Doctrinal Change and Continuity and the Revolution in Military Affairs. Carlisle Barracks: Strategic Studies Institute, May 1994. 83pp. (U413 .A66J23 1994)

Mazarr, Michael J. The Revolution in Military Affairs: A Framework for Defense Planning. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 10 June 1994. 45pp. (U413 .A66M29 1994)

Mazarr, Michael J., Jeffrey Shaffer, and Benjamin Ederington. The Military Technical Revolution: A Structural Framework: Final Report of the CSIS Study Group on the MTR. Washington: Center for Strategic and International Studies, 1993. 63pp. (U104 .M39 1993)

Metz, Steven, and James Kievit. The Revolution in Military Affairs and Conflict Short of War. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 25 July 1994. 37pp. (U413 .A66M56 1994)

Metz, Steven, and James Kievit. Strategy and the Revolution in Military Affairs: From Theory to Policy. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 27 June 1995. 38pp. (U413 .A66 M47 1995)

Odom, William E. America's Military Revolution: Strategy and Structure after the Cold War. Lanham, MD: American University Press, 1993. 186pp. (UA23 .O35 1993)

Schneider, Barry R., and Lawrence E. Grinter, eds. Battlefield of the Future: 21st Century Warfare Issues. Maxwell Air Force Base: Air University Press, 1995. 279pp. (UG635.31 .B37 1995)

Science Applications International Corporation. Strategic Assessment Center. The U.S. Navy Roundtable in Military Affairs. McLean, VA: July 1994. 1 vol. (VA50 .U7 1994)

Sullivan, Gordon R., and James M. Dubik. Land Warfare in the 21st Century. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, February 1993. 32pp. (U413 .A66S87 1993)

Tilford, Earl H., Jr. The Revolution in Military Affairs: Prospects and Cautions. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 23 June 1995. 20pp. (U413 .A66T55 1995)

Toffler, Alvin, and Heidi Toffler. War and Anti-War: Survival at the Dawn of the 21st Century. Boston: Little, Brown, 1993. 302pp. (U102 .T64 1993)

U.S. Department of Defense. Report of the Secretary of Defense to the President and the Congress, by William J. Perry. Washington: March 1996. 1 vol. (UA23 .A51 1996 P47)
    "Technology for 21st Century Warfare," pp. 83-86.
    "Space Forces," pp. 205-212.
    "Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance," pp. 235-249.

U.S. Department of the Air Force. <u>Gulf War Air Power Survey Summary Report</u>, by Thomas A Keaney and Eliot A. Cohen. Washington: Office of the Secretary of the Air Force, 1993. 276pp. (DS79.724 .U6G85 1993 SUM)
  "Was Desert Storm a Revolution in Warfare?" pp. 235-251.

U.S. Department of the Army. Office of the Assistant Secretary of the Army (Research, Development and Acquisition). <u>Weapon Systems</u>. Washington: 1996. 260pp. (UF503 .W43 1996)
  "Win the Information War," pp. 81-133.
  "Conduct Precision Strikes," pp. 134-153.
  "Dominate the Maneuver Battle," pp. 154-223.

U.S. Department of the Army. Office of the Deputy Chief of Staff for Operations and Plans. <u>The United States Army 1996 Modernization Plan</u>. Washington: 1996. 1 vol. (Ref UA25 .U563 1996)
  The five modernization objectives are : project and sustain, protect the force, win the information war, conduct precision strike, and dominate maneuver.

Van Creveld, Martin L. <u>Technology and War: From 2000 B.C. to the Present</u>. New York: Brassey's, 1991. 342pp. (U27 .V271 1991)

Van Creveld, Martin L. <u>The Transformation of War</u>. New York: Free Press, 1991. 254pp. (U42 .V36 1991)

White, Elwood L, comp. <u>Tooling for War: Military Transformation in the Industrial Age</u>. Bibliography. Colorado Springs: U.S. Air Force Academy Library, September 1994. 94pp. (UG633 .Z9A3 no. 87)

CONCEPT, ANALYSIS, AND FOCUSED ASPECTS - PERIODICAL ARTICLES

Anderson, Gary W., and Terry C. Pierce. "Leaving the Technocratic Tunnel." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 69-75.

Bacevich, A.J. "Preserving the Well-Bred Horse." (Author examines the Revolution in Military Affairs) National Interest, no. 37 (Fall 1994): 43-49.

Bergman, Kenneth R. "Space and the Revolution in Military Affairs." (Article is based on the idea that the RMA is the intersection of four areas: space, information warfare, precision strike, and dominate maneuver) Marine Corps Gazette 79 (May 1995): 58-60.

Blank, Stephen J. "Preparing for the Next War: Reflections on the Revolution in Military Affairs." Strategic Review 24 (Spring 1996): 17-25.

Bodnar, John W. "The Military Technical Revolution: From Hardware to Information." Naval War College Review 46 (Summer 1993): 7-21.

Bowdish, Randall G. "The Revolution in Military Affairs: The Sixth Generation." Military Review 75 (November-December 1995): 26-33.

Bracken, Paul. "The Military after Next." Washington Quarterly 16 (Autumn 1993): 157-174.

Builder, Carl H. "Looking in All the Wrong Places? The Real Revolution in Military Affairs Is Staring Us in the Face." Armed Forces Journal International 132 (May 1995): 38-39.

Bunker, Robert J. "Generations, Waves, and Epochs: Modes of Warfare and RPMA (Revolution in Political and Military Affairs)." Airpower Journal 10 (Spring 1996): 18-28.

Bunker, Robert J. "Transition to Fourth Epoch War." Marine Corps Gazette 78 (September 1994): 20-32.

Caldwell, Warren, Jr. "Promises, Promises." (Author cautions against over-emphasis on technology alone) Proceedings - U.S. Naval Institute 122 (January 1996): 54-57.

Cohen, Eliot A. "Come the Revolution." National Review 47 (31 July 1995): 26-30.

Cohen Eliot A. "A Revolution in Warfare." Foreign Affairs 75 (March-April 1996): 37-54.

Colucci, Frank. "The Army's RAH-Comanche." Army 46 (May 1996): 38-44.

Correll, John T. "Signs of a Revolution." Editorial. Air Force Magazine 78 (August 1995): 2.

Dick, Charles. "Russian Views on Future War." 3 pts. Jane's Intelligence Review 5 (September 1993): 390-392; 5 (October 1993): 451-453; 5 (November 1993): 488-495.

Echevarria, Antulio J. "War, Politics and RMA: The Legacy of Clausewitz." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 76-80.

Echevarria, Antulio, and John M. Shaw. "The New Military Revolution: Post Industrial Change." Parameters 22 (Winter 1992-1993): 70-79.

Erlich, Jeff, and Robert Holzer. "Smaller Units Wave of Future: 21st Century Fighters Seen Grouped in Lethal, Highly Mobile Bands." (Article focuses on reports from five Revolution in Military Affairs Task Groups) Army Times (19 June 1995): 30.

Fastabend, David A. "Checking the Doctrinal Map: Can We Get There from Here with FM 100-5?" Parameters 25 (Summer 1995): 37-46.

FitzGerald, Mary C. "Russia's New Military Doctrine." RUSI Journal 137 (October 1992): 40-48.

FitzGerald, Mary C. "The Soviet Image of Future War: Through the Prism of the Persian Gulf." Comparative Strategy 10 (October-December 1991): 393-435.

FitzSimonds, James R. "The Coming Military Revolution: Opportunities and Risks." Parameters 25 (Summer 1995): 30-36.

FitzSimonds, James R. "Next: 'The Ultimate Vision': Intelligence and the Emerging Revolution in Military Affairs." Sea Power 38 (November 1995): 47-49.

FitzSimonds, James R., and Jan M. van Tol. "Revolutions in Military Affairs." JFQ: Joint Force Quarterly, no. 4 (Spring 1994) pp. 24-31.

Given, K. "A Revolution in Military Affairs - The Stuff of Fables?" Australian Defence Force, no. 116 (January-February 1996): 5-9.

Glashow, Jason. "DoD Sees China Molding Doctrine Based on Gulf War." (Has China begun developing a version of the Revolution in Military Affairs?) Defense News 11 (29 April-5 May 1996): 3, 36.

Glosson, Buster C. "Impact of Precision Weapons on Air Combat Operations." (Lessons learned from Operation Desert Storm) Airpower Journal 7 (Summer 1993): 4-10.

Goure, Dan. "Is There a Military-Technical Revolution in America's Future?" Washington Quarterly 16 Autumn 1993): 175-192.

Gray, Colin S. "The Changing Nature of Warfare?" Naval War College Review 49 (Spring 1996): 7-22.

Green, Brian. "Technology on Five Fronts." ("The Pentagon is concentrating on seven areas of technology, five of which are critical to the U.S. Air Force.") Air Force Magazine 75 (September 1992): 62-66.

Hayes, Bradd C. "Institutionalizing Innovation: Objective or Oxymoron?" Naval War College Review 48 (Autumn 1995): 7-18.

Herman, Paul F., Jr. "The Revolution in 'Military' Affairs." Strategic Review 24 (Spring 1996): 26-30.

Holzer, Robert, and Stephen C. LeSueur. "DoD Plans Revolution in Technology, Tactics." (The launching of the Revolution in Military Affairs initiative) Defense News 9 (23-29 May 1994): 4, 50.

Jablonsky, David. "US Military Doctrine and the Revolution in Military Affairs." Parameters 24 (Autumn 1994): 18-36.

Jeremiah, David. "The Military and the Four Technological Revolutions." Defense Issues 8, no. 5 (1993): 1-4.

Kaminski, Paul G. "Investing in Tomorrow's Technology Today." Defense Issues 10, no. 46 (1995): 1-12.

Kendall, Frank. "Exploiting the Military Technical Revolution: A Concept for Joint Warfare." Strategic Review 20 (Spring 1992): 23-30.

Klain, David R. "Are We Ready for Tomorrow?" Proceedings - U.S. Naval Institute 122 (April 1996): 55-56.

Krepinevich, Andrew F. "Cavalry to Computer: The Pattern of Military Revolutions." National Interest, no. 37 (Fall 1994): 30-42.

Lind, William S., John F. Schmitt, and Gary I. Wilson. "Fourth Generation Warfare: Another Look." Marine Corps Gazette 78 (December 1994): 34-37.

Lohide, Kurtis D. "Desert Storm's Siren Song." Airpower Journal 9 (Winter 1995): 100-111.

Macgregor, Douglas A. "Future Battle: The Merging Levels of War." Parameters 22 (Winter 1992-1993): 33-46.

McKenzie, Kenneth F., Jr. "An Ecstasy of Fumbling: Doctrine and Innovation." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 62-68.

Metcalf, Marvin G. "Acoustics on the 21st Century Battlefield." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 44-47.

Metz, Steven, and James Kievit. "The Siren Song of Technology and Conflict Short of War." Special Warfare 9 (January 1996): 2-10.

Morrison, David C. "Bang! Bang! You've Been Inhibited." (Focuses on the use of nonlethal weapons) National Journal 24 (28 March 1992): 758-759.

Morrocco, John D. "U.S. Military Eyes Revolutionary Change." Aviation Week & Space Technology 142 (1 May 1995): 22-23.

Mowery, Beverly P. "Revolutions Under Way Define Challenges Ahead." Signal 50 (April 1996): 70.

Owens, William A. "The American Revolution in Military Affairs." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996)" 37-38.

Owens, William A. "The Emerging System of Systems." Military Review 75 (May-June 1995): 15-19.

Owens, William A. "Four Revolutions in Military Thinking." ROA National Security Report (August 1995): 29-32, 44.

Owens, William A. "A Report on the JROC (Joint Requirements Oversight Council) and the Revolution in Military Affairs." Marine Corps Gazette 79 (August 1995): 46-53.

Owens, William A. "System-of-Systems: US' Emerging Dominant Battlefield Awareness Promises to Dissipate the 'Fog of War'." Armed Forces Journal International 133 (January 1996): 47.

Patton, James H., Jr. "The New 'RMA': It's Only Just Begun." Naval War College Review 49 (Spring 1996): 23-32.

Peters, Ralph. "After the Revolution." Parameters 25 (Summer 1995): 7-14.

Ritcheson, Philip L. "The Future of 'Military Affairs': Revolution or Evolution?" Strategic Review 24 (Spring 1996): 31-40.

Shalikashvili, John M. "A Word from the Chairman." JFQ: Joint Force Quarterly, no. 6 (Autumn-Winter 1994-1995): 4-8.

Singh, Ajay. "Time: The New Dimension in War." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 56-61.

Slipchenko, Vladimir I. "A Russian Analysis of Warfare Leading to the Sixth Generation." Field Artillery (October 1993): 38-41.

Smith, Edward A., Jr. "Putting it through the Right Window." (Author says that "We can put a Tomahawk missile through the window of any building we choose, but only precise intelligence will tell us which window in which building must be hit at what time to meet our objectives.") Proceedings - U.S. Naval Institute 121 (June 1995): 38-40.

Smullen, Robert J. "The Infantryman's RMA." Marine Corps Gazette 80 (January 1996): 22-23.

Starr, Barbara. "Plotting Revolution at the Pentagon." <u>Jane's Defence Weekly</u> 23 (10 June 1995): 38-41.

Stech, Frank J. "Sociopolitical Stresses and the RMA." <u>Parameters</u> 25 (Summer 1995): 47-54.

Sullivan, Gordon R., and James M Dubik. "Land Warfare in the 21st Century." <u>Military Review</u> 73 (September 1993): 13-32.

Szafranski, Richard. "Peer Competitors, the RMA, and New Concepts: Some Questions." <u>Naval War College Review</u> 49 (Spring 1996): 113-119.

Tapscott, Mark, and Kay Atwal. "New Weapons That Win Without Killing on DOD's Horizon." <u>Defense Electronics</u> 25 (February 1993): 41-46.

Williams, Robert H. "Galloping Tempo, Ferocity Shape Course of Combat: Army Identifies Technologies Needed to Prevail on Next Century Battlefields." <u>National Defense</u> 79 (February 1995): 18-19.

INFORMATION WARFARE

BOOKS AND DOCUMENTS

Algermissen, Robert W. Digitization's Effect on Fire Support Coordination Measures. Fort Leavenworth: U.S. Army Command and General Staff College, School of Advanced Military Studies, 1994. 59pp. (U415 .A42 95 A43)

Allard, C. Kenneth. Command, Control, and the Common Defense. New Haven: Yale University Press, 1990. 317pp. (UA23 .A593 1990)

Barnett, Jeffery R. Future War: An Assessment of Aerospace Campaigns in 2010. Maxwell AFB: Air University Press, 1996. 169pp. (UG635.3 .B37 1996)

Bjorklund, Raymond C. The Dollars and Sense of Command and Control. Washington: National Defense University Press, 1995. 289pp. (UB212 .B46 1995)

Blechman, Barry M., and others. The American Military in the Twenty-First Century. New York: St. Martin's Press, 1993. 498pp. (UA23 .A66 1993)

Brown, Frederic J. The U.S. Army in Transition II: Landpower in the Information Age. Washington: Brassey's, 1993. 205pp. (UA25 .B76 1993)

Brungess, James R. Setting the Context: Suppression of Enemy Air Defenses and Joint War Fighting in an Uncertain World. Maxwell Air Force Base: Air University Press, 1994. 225pp. (UG633 .B79 1994)

Campen, Alan D., ed. The First Information War: The Story of Communications, Computers, and Intelligence Systems in the Persian Gulf War. Fairfax, VA: AFCEA International Press, 1992. 195pp. (UB212 .F57 1992)

Cardine, Christopher V. Digitization of the Battlefield. Strategy Research Project. Carlisle Barracks: U.S. Army War College, May 1994. 56pp. (AD-A280 088)

Coakley, Thomas P., ed. C3I: Issues of Command and Control. Washington: National Defense University Press, 1991. 408pp. (UB212 .C62 1991)

Coakley, Thomas P. Command and Control for War and Peace. Washington: National Defense University Press, 1992. 219pp. (UB212 .C623 1991)

Colodney, Lori L.S. Getting Command and Control Systems Back into the Fight on the Digitized Battlefield. Fort Leavenworth: U.S. Army Command and General Staff College, School of Advanced Military Studies, 1994. 55pp. (U415 .A42 95 C54)

Cordesman, Anthony H., and Abraham R. Wagner. The Lessons of Modern War. Vol 4: The Gulf War. Boulder: Westview Press, 1996. 1022pp. (U42 .C59 v.4)
"Command, Control, Communications, Computers, and Battle Management," pp. 227-277.

De Landa, Manuel. War in the Age of Intelligent Machines. New York: Zone Books, 1991. 271pp. (UG478 .D4 1991)

Dishong, Donald J. On Studying the Effect of Information Warfare on C2 Decision Making. Thesis. Monterey: U.S. Naval Postgraduate School, June 1994. 54pp. (V425 .U5 TH D57)

Ederington, Benjamin, and Michael J. Mazarr, eds. Turning Point: The Gulf War and U.S. Military Strategy. Boulder: Westview Press, 1994. 290pp. (UA23 .T85 1994)

Fox, Robert D. Using Today's Technology to Improve Mobile C4I for the Operational Commander. Study Project. Carlisle Barracks: U.S. Army War College, April 1993. 40pp. (AD-A263 613)

Golden, James R. Economics and National Strategy in the Information Age: Global Networks, Technology Policy, and Cooperative Competition. Westport: Praeger, 1994. 301pp. (HC110 .I55G65 1994)

Greenberg, Bradley S., and Walter Gantz, eds. Desert Storm and the Mass Media. Cresskill, NJ: Hampton Press, 1993. 447pp. (DS79.739 .D47 1993)

Griffin, Gary B. The Directed Telescope: A Traditional Element of Effective Command. Fort Leavenworth: U.S. Army Command and General Staff College, Combat Studies Institute, 1991. 45pp. (U415 .C6D57 1991)

Head, William P., and Earl H. Tilford, Jr., eds. The Eagle in the Desert: Looking Back on U.S. Involvement in the Persian Gulf War. Westport: Praeger, 1996. 350pp. (DS79.724 .U6E2 1996)
"Command and Control in the Gulf War: A Military Revolution in Airpower?", by Mark D. Mandeles, pp. 157-172.

Hill, Clarence, and Jay Hudson., compilers. Bibliography for Information Warfare. Newport, U.S. Naval War College, 1 September 1995. 52pp. (Z6724 .C62H55 1995)
Includes extensive list of doctrinal publications.

Hollister, Gregory S. Multilevel Security: How It Fits in the Strategic Vision "C4I for the Warrior". Study Project. Carlisle Barracks: U.S. Army War College, February 1993. 26pp. (AD-A264 238)

Hust, Gerald R. Taking Down Telecommunications. Thesis, School of Advanced Airpower Studies. Maxwell Air Force Base: Air University Press, September 1994. 65pp. (UG635.3 .U51 TH H97)

Hutcherson, Norman B. Command and Control Warfare: Putting Another Tool in the War-Fighter's Data Base. Research Report, Airpower Research Institute. Maxwell Air Force Base: Air University Press, September 1994. 63pp. (UG635.32 .H87 1994)

Isensee, Ernest K. Impacts on the Operational Commander in the Information Age. Newport: U.S. Naval War College, Department of Operations, 13 February 1995. 17pp. (V420 .I72 1995)

Johnsen, William T., and others. The Principles of War in the 21st Century: Strategic Considerations. Carlisle Barracks: Strategic Studies Institute, 1 August 1995. 38pp. (U413 .A66J627 1995)

Johnson, Stuart E., and Martin C. Libicki, eds. Dominant Battlespace Knowledge: The Winning Edge. Washington: National Defense University Press, 1995. 149pp. (U411 .D65 1995)

Josephson, Edward H., and Raymond M. Macedonia. Fighting Smarter: Leveraging Information Age Technology. Land Warfare Paper No.18. Arlington, VA: Association of the United States Army, Institute of Land Warfare, August 1994. 21pp. (UG23 .J67 1994)

Kane, Pamela. PC Security and Virus Protection: The Ongoing War Against Information Sabotage. New York: M&T Books, 1994. 523pp. (QA76.9 .A25K34 1994)

Knuth, Patricia E., comp. Information Resource Management: A Selected Bibliography. Carlisle Barracks: U.S. Army War College Library, February 1995. 34pp. (U413 .Z92I54 1995)

Lee, James G. Counterspace Operations for Information Dominance. Thesis, School of Advanced Airpower Studies. Maxwell Air Force Base: Air University Press, October 1994. 43pp. (UG635.3 .U51 TH L22)

Lesser, Harry K. The Revolution in Military Affairs and Its Effect on the Future Army. Newport: U.S. Naval War College, Advanced Research Department, June 1994. 50pp. (V420 .U53L47 1994)

Lewonowski, Mark C. Information War. Research Report. Maxwell Air Force Base: U.S. Air University, Air War College, April 1991. 41pp. (UG635.3 .U5 RR-91 L28)

Libicki, Martin C. The Mesh and the Net: Speculations on Armed Conflict in a Time of Free Silicon. McNair Paper No. 28. Washington: National Defense University, Institute for National Strategic Studies, March 1994. 127pp. (U411 .I6M12 no. 28)

Logan, Paul R. A Structured Approach to Information Technology Management in the Department of Defense. (Provides an outline or study guide for an ITM (Information Technology Management) curriculum at the Naval Postgraduate School) Thesis. Monterey: U.S. Naval Postgraduate School, September 1994. 236pp. (V425 .U5 TH L53)

Luoma, William M. Netwar: The Other Side of Information Warfare. Newport: U.S. Naval War College, February 1994. 34pp. (V420 .L96 1994)

Munro, Neil. The Quick and the Dead: Electronic Combat and Modern Warfare. New York: St. Martin's Press, 1991. 324pp. (UG485 .M79 1991)

National Defense University. Center for Advanced Command Concepts and Technology. Proceedings of the First International Symposium on Command and Control Research and Technology, Held at National Defense University, Washington, D.C., June 19-22, 1995. Fort McNair: National Defense University, Institute for National Strategic Studies, 1995. 600pp. (U411 .I6S95 1995)

National Research Council. Board on Army Science and Technology. Star 21: Strategic Technologies for the Army of the Twenty-First Century. Washington: National Academy Press, 1992. 311pp. (UG23 .N38 1992)

Nelson, David B., comp. Information-Based Warfare: An Annotated Bibliography. Fort McNair: National Defense University, Information Resources Management College, School of Information Warfare and Strategy, April 1994. 48pp. (U411 .I52N24 1994)

Pound, David S. Contribution of Digitized Communications to the Extended Close Battlefield. Thesis. Monterey: U.S. Naval Postgraduate School, September 1994. 104pp. (V425 .U5 TH P69 1994)

Prevou, Michael I. The Battle Command Support System: A Command and Control System for Force XXI. Fort Leavenworth, U.S. Army Command and General Staff College, School of Advanced Military Studies, 1994. 1 vol. (U415 .A42 95 P62)

Rackham, Peter, ed. Jane's C4I Systems, 1995-96. 7th ed. Alexandria, VA: Jane's Information Group, 1995. 341pp. (Ref UB212 .J36 1995-96)

Rand Corporation. Future Technology-Driven Revolutions in Military Operations: Results of a Workshop, by Richard O. Hundley and E.C. Gritton. Santa Monica: 1994. 105pp. (U393.5 .H86 1994)
    "Cyberspace Security & Safety," pp. 64-75.

Rand Corporation. Information Technologies and the Future of Land Warfare, by Brian Nichiporuk and Carl H. Builder. Report MR-560-A. Santa Monica: 1995. 87pp. (UA25 .N53 1995)

Rand Corporation. Understanding Commanders' Information Needs, by James P. Kahan, D. Robert Worley, and Cathleen Stasz. Report R-3761-A. Santa Monica: June 1989. 98pp. (UB212 .K23 1989)

Rauch, Maguerite C., comp. Information Warfare. Bibliography. Newport: U.S. Naval War College Library, December 1995. 15pp. (Periodical Index Table)

Rowe, Wayne J. Information Warfare: A Primer for Navy Personnel. Research Report. Newport: U.S. Naval War College, Center for Naval Warfare Studies, Strategic Research Department, June 1995. 34pp. (V420 .C51 95-6)

Schneider, Barry R., and Lawrence E. Grinter, eds. Battlefield of the Future: 21st Century Warfare Issues. Maxwell Air Force Base: Air University Press, 1995. 279pp. (UG635.31 B37 1995)

Schneider, Michael W. Electromagnetic Spectrum Domination: 21st Century Center of Gravity or Achilles Heel? Fort Leavenworth: U.S. Army Command and General Staff College, School of Advanced Military Studies, 1994. 60pp. (U415 .A42 94 S25)

Schwartau, Winn. Information Warfare: Chaos on the Electronic Superhighway. New York: Thunder's Mouth Press, 1994. 432pp. (QA76.9 .A25S354 1994)

Science Applications International Corporation. Information Warfare: Legal, Regulatory, Policy and Organizational Considerations for Assurance. McLean, VA: July 1995. 1 vol. (U163 .I7 1995)

Smith, Douglas V. Military Deception and Operational Art. Newport: U.S. Naval War College, Center for Naval Warfare Studies, Strategic Research Department, 1993. 19pp. (V420 .S54 1993)

Smith, Kevin B. The Crisis and Opportunity of Information War. Fort Leavenworth: U.S. Army Command and General Staff College, School of Advanced Military Studies, 1994. 63pp. (U415 .A42 94 S54)

Snyder, Frank M. Command and Control: The Literature and Commentaries. Washington: National Defense University Press, 1993. 167pp. (U411 .I6S59 1993)

Sterling, Bruce. The Hacker Crackdown: Law and Disorder on the Electronic Frontier. New York: Bantam, 1992. 316pp. (HV6773 .S74 1993)

Sullivan, Gordon R., and Anthony M Coroalles. The Army in the Information Age. Carlisle Barracks: U.S. Army War College, March 1995. 22pp. (U413 .A66S88 1995)

Sullivan, Gordon R., and James M. Dubik. War in the Information Age. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, June 1994. 23pp. (U413.A66S96 1994)

Toffler, Alvin. Powershift: Knowledge, Wealth, and Violence at the Edge in the 21st Century. New York: Bantam Books, 1990. 585pp. (HN17.5 T6417 1990)

Toffler, Alvin, and Heidi Toffler. War and Anti-War: Survival at the Dawn of the 21st Century. Boston: Little, Brown, 1993. 302pp. (U102 .T64 1993)

U.S. Army Communications-Electronics Command. Advance Planning Briefing for Industry: "Winning the Information War". Fort Monmouth: 1994. 621pp. (UB255 A28 1994)

U.S. Army Science Board. <u>Technical Information Architecture for Army Command, Control, Communications and Intelligence</u>, by Michael S. Frankel, and others. Washington: Office of the Assistant Secretary of the Army (Research, Development and Acquisition), April 1995. 1 vol. (UA943 .T43 1995)

U.S. Defense Science Board. <u>Report of the Defense Science Board Summer Study Task Force on Information Architecture for the Battlefield</u>. Washington: Office of the Under Secretary of Defense for Acquisition & Technology, October 1994. 1 vol. (QA76.755 .U55 1994)

U.S. Department of Defense. <u>Report of the Secretary of Defense to the President and the Congress</u>, by William J. Perry. Washington: March 1996. 1 vol. (UA23 .A51 1996 P47)
   "Space Forces," pp. 205-212.
   "Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance," pp. 235-249.

U.S. Department of the Army. Director of Information Systems for Command, Control, Communications, and Computers (C4). <u>Army Enterprise Strategy: The Vision</u>. Washington: 1993. 32pp. (UA25 .A74 1993)

U.S. Department of the Army. Office of the Assistant Secretary of the Army (Research, Development and Acquisition). <u>Weapon Systems</u>. Washington: 1996. 260pp. (UF503 .W43 1996)
   "Win the Information War," pp. 81-153.

U.S. Department of the Army. Office of the Chief of Staff. Louisiana Maneuvers Task Force. <u>Force XXI, America's Army of the 21st Century: Meeting the 21st Century Challenge</u>. Fort Monroe: 1995. 33pp. (UA25 .F675 1995)

U.S. Department of the Army. Office of the Deputy Chief of Staff for Operations and Plans. <u>United States Army 1996 Modernization Plan</u>. Washington: 1996. 1 vol. (Ref UA25 .U563)

U.S. General Accounting Office. <u>Battlefield Automation: Army's Digital Battlefield Plan Lacks Specific Measurable Goals: Report to Congressional Committees</u>. Washington: November 1995. 17pp. (UA943 .U533 1995)

U.S. Joint Chiefs of Staff. <u>Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations</u>. Joint Pub 6-0. Washington: 30 May 1995. 1 vol. (Mil. Pubs.)

U.S. Joint Chiefs of Staff. <u>Joint Doctrine for Command and Control Warfare (C2W)</u>. Joint Pub 3-13.1. Washington: 7 February 1996. 1 vol. (Mil. Pubs.)

U.S. Joint Chiefs of Staff. Architecture and Integration Division, and Global Command and Control System Division. <u>C4I for the Warrior: Global Command & Control System: From Concept to Reality</u>. Washington: 1994. 18pp. (UB212 .U65 1994)

Van Creveld, Martin L. <u>Command in War</u>. Cambridge, MA: Harvard University Press, 1985. 339pp. (UB212 .V36 1985)

INFORMATION WARFARE - PERIODICAL ARTICLES

Ackerman, Robert K. "Advanced Information Systems Impel Operational Technologies: Research Agency Provides a Charge to New Electronics Systems Ranging from Thoughtful Sensors to Faithful Computer Simulations." Signal 50 (March 1996): 41-43.

Ackerman, Robert K. "Bytes Transform Army, Turn Service Roles Upside Down." Signal 48 (May 1994): 21-24.

Ackerman, Robert K. "Chip Architecture Removes Signal Processing Bottleneck: Hardware Ranging from Artillery Shells to Satellites May Benefit from Scalable Discrimination Capabilities." Signal 50 (February 1996): 58-60.

Ackerman, Robert K. "Communications Links Vital to Managing Defense Intelligence: Measurement and Signature Intelligence also May Be Key to Ensuring Success on the Electronic Battlefield." Signal 50 (September 1995): 25-27.

Ackerman, Robert K. "Direct Satellite Telephony Offers Terrestrial Linkage: Digital Cellular Technology Allows Orbital System to Interoperate with Public, Private Land Networks." (Describes the Globalstar system to be completed in 1999) Signal 49 (April 1995): 26-29.

Ackerman, Robert K. "Military Planners Gird for Information Revolution: The Joint Staff Envisions a Future Where Implementing New Technologies Is an Essential Part of Force Definition." Signal 49 (May 1995): 71-76.

Ackerman, Robert K. "Multilevel Security Embraces Data Bases, Grants Flexibility: A Data Base Management System Is Spearheading an Air Force Charge to Open Systems Architecture." Signal 49 (October 1994): 51-54.

Ackerman, Robert K. "Vital Intelligence Technologies Converge on Information Systems: Sharing Timely Data across the Community Requires a Coherent Strategy for Implementing Edge Electronics." Signal 50 (April 1996): 35-37.

Ackerman, Robert K. "When Words Fail, Data Base Themes Prevail: Software Cuts to the Chase, Zeroes in on Specific Topics from Voluminous Amounts of Information." Signal 50 (March 1996): 51-53.

Albano do Amarante, Jose Carlos. "The Automated Battle: A Feasible Dream?" Military Review 74 (May 1994): 58-61.

Alexander, David. "Information Warfare and the Digitised Battlefield." Military Technology 19 (September 1995): 57-64.

Alterman, Stanley B. "GPS (Global Positioning System) Dependence: A Fragile Vision for US Battlefield Dominance." Journal of Electronic Defense 18 (September 1995): 52-54.

15

Anthes, Gary H. "Info Warfare Risk Growing." Computerworld 29 (22 May 1995): 1, 16. UMI ProQuest, General Periodicals Ondisc, item 02388969.

Anthes, Gary H. "New Laws Sought for Info Warfare." Computerworld 29 (5 June 1995): 55. UMI ProQuest, General Periodicals Ondisc, item 02408116.

Arbogast, Gordon W., and Ronnie Britan. "Academia Rides the Changing Tide of C3I: Officers, Civilians Are Candidates for Information Instruction Discipline." Signal 47 (May 1993): 65-66.

Arnett, Eric H. "Welcome to Hyperwar." Bulletin of the Atomic Scientists 48 (September 1992): 14-21.

Arnold, H.D., and others. "Targeting Financial Systems as Centers of Gravity: 'Low Intensity' to 'No Intensity' Conflict." Defense Analysis 10 (August 1994): 181-208.

Arnold, Wallace C., and Thomas H. Killion. "MANPRINT (Manpower and Personnel Integration): Battle Command and Digitization." Military Review 75 (May-June 1995): 48-55.

Arquilla, John. "Strategic Implications of Information Dominance." Strategic Review 22 (Summer 1994): 24-30.

Arquilla, John, and David Ronfeldt. "Cyberwar Is Coming!" Comparative Strategy 12 (April-June 1993): 141-165.

Baciocco, David A. "Small Dishes Serve Global High-Volume Tactical Menu: Direct Broadcast Allows Multiple Users to Snare One-Way Satellite Signals with Mobile Antennas." Signal 50 (March 1996): 27-30.

Bennett, Charles H., Giles Brassard, and Artur K. Ekert. "Quantum Cryptography." Scientific American 267 (October 1992): 50-57.

Berg, Roger L. "Joint Ground Station Offers Real-Time Tactical Ballistic Missile Warning: Proliferation of Short-Range Missiles Mandates Faster, More Accurate Alerts." Signal 49 (March 1995): 40-41.

Bingham, Price T. "Awake, Aware, and Alert." (Moving target indicator (MTI) products) Armed Forces Journal International 133 (October 1995): 56-57.

Bingham, Price T. "Revolutionary Warfare through Interdiction." (Article emphasizes the value of JSTARS - Joint Surveillance and Target Attack Radar System) Airpower Journal 10 (Spring 1996): 29-35.

Blair, Dennis. "Jane's Interview (with RADM Dennis Blair, associate director of central intelligence for military support)." Interview by Barbara Starr. Jane's Defence Weekly 24 (28 October 1995): 32.

Bleecker, Samuel E. "The Virtual Organization." Futurist 28 (March-April 1994): 9-12, 14.

Blount, Kerry A. "A Two-Component Strategy for Winning the Information War." Army 45 (January 1995): 10-11.

Blount, Kerry A. "Wrestling with Information Warfare's 'Dark Side'." Army 46 (February 1996): 9-15.

Blount, Kerry A., and Lauren D. Kohn. "C2 Warfare in FM 100-6." Military Review 75 (July-August 1995): 66-69.

Bodnar, John W. "The Military Technical Revolution: From Hardware to Information." Naval War College Review 46 (Summer 1993): 7-21.

Boorda, Jeremy M. "Leading the Revolution in C4I." (Information warfare and the Navy) JFQ: Joint Force Quarterly, no. 9 (Autumn 1995): 14-17.

Borchini, Charles P., and Mari Borstelmann. "PSYOP in Somalia: The Voice of Hope." Special Warfare 7 (October 1994): 2-9.

Boyd, Morris J. "TRADOC Pamphlet 525-5: A Milestone in the Army's Journey into the Next Century." Army 45 (May 1995): 25-28.

Boyd, Morris J., and Michael Woodgerd. "Force XXI Operations." Military Review 74 (November 1994): 17-28.

Bransford, William M. "Fire Support and Desert Hammer VI--the Advanced Warfighting Experiment." Field Artillery (October 1994): 40-43.

Braunberg, Andrew C. "Emergency Communication Accesses Public Networks." Signal 49 (April 1995): 61-64.

Braunberg, Andrew C. "Fleet Data Rate Demands Drive Fiber Optics at Sea: Increased Data Link Performance Improves Naval Satellite and Airborne Platform Communications." Signal 49 (February 1995): 49-51.

Braunberg, Andrew C., and Robert K. Ackerman. "Advanced Research Projects Agency Emphasizes Rapid Development, Use." Signal 50 (December 1995): 21-23.

Buchanan, Nancy. "Decoding the Mysteries of Cryptography." Armada International 18 (October-November 1994): 20-30.

Bugliarello, George. "Telecommunications, Politics, Economics, and National Sovereignty: A New Game." Airpower Journal 10 (Spring 1996): 6-17.

Bunker, Robert J. "Generations, Waves, and Epochs: Modes of Warfare and RPMA (Revolution in Political and Military Affairs)." Airpower Journal 10 (Spring 1996): 18-28.

Burgess, Lisa. "U.S. Army Tests Digitized Battlefield in Desert Games." Defense News 9 (2-8 May 1994): 14.

Burke, Charles M. "The 'Bondage' of Tradition." (to principles, procedures and protocols) Military Review 75 (July-August 1995): 10-12.

Busey, James B., IV. "Battlefield Technologies Muster in Synthetic Arenas." Signal 49 (July 1995): 15.

Busey, James B., IV. "Information Superiority Dashes Thorny Power Projection Issues." Signal 49 (November 1994): 13.

Busey, James B., IV. "Information Warfare Calculus Mandates Protective Actions." Signal 49 (October 1994): 15.

Busey, James B., IV. "Integral Security Mechanisms Are Priority, not Afterthought." Commentary. Signal 50 (October 1995): 13.

Busey, James B., IV. "Network Security Firewalls Implement Policy, Control Access." Commentary. Signal 50 (March 1996): 15.

Busey, James B., IV. "Survival, Combat Effectiveness Rest on Sharing Information." Signal 49 (March 1995): 13.

Campbell, William H. "NTC (National Training Center) to Test Digitization." Army 44 (February 1994): 34.

Campen, Alan D. "Cooperative Effort Encourages Safe Information Highway Travel." Signal 50 (October 1995): 43-44.

Campen, Alan D. "Information Warfare Is Rife with Promise, Peril." Signal 48 (November 1993): 19-20.

Campen, Alan D. "Intelligence Leads Renaissance in Military Thinking." Signal 48 (August 1994): 17-18.

Campen, Alan D. "Jointness, Integration, Commercial Products Reshape Federal Market." Signal 49 (January 1995): 61-62.

Campen, Alan D. "Rush to Information-Based Warfare Gambles with National Security: Converting Information Technology into Military Capability Risks Ceding Strategic Advantage to Low-Tech Adversaries." Signal 49 (July 1995): 67-69.

Campen, Alan D. "Vulnerability of Info Systems Demands Immediate Action: Reliance by Military on Commercial Communication Infrastructure Poses Significant Peril to United States." National Defense 80 (November 1995): 26-27.

Canan, James W. "'Forward...into Outer Space': The Essential Elements of Situational Awareness." Sea Power 38 (September 1995): 38-42.

Capaccio, Tony. "Basic Change in Mission Planning." (Describes mission planning benefits derived from advances in software, computer processing, and dissemination of digital maps and imagery) Air Force Magazine 77 (December 1994): 58-62.

Caravella, Frank J. "ADA's (Air Defense Artillery's) Role in Winning the Information War." Air Defense Artillery (September-October 1995): 2-3.

Cassidy, Michael S. "SIGINT (Signal Intelligence): An Important Part of Air Force Intelligence." American Intelligence Journal 15 (Spring-Summer 1994): 20.

Caton, Jeffrey L. "Joint Warfare and Military Dependence on Space." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 48-53.

Cerjan, Paul G., and Robert B. Clarke. "NDU (National Defense University) Develops a Discipline in Information-Based Warfare." Army 44 (May 1994): 18-19.

Cetron, Margin J., and Owen Davies. "The Future Face of Terrorism." Futurist 28 (November-December 1994): 10-15.

Chilcoat, Richard A. "Preparing Strategic Leaders in the Age of Information: The 'Fourth' Army War College." Army 45 (October 1995): 163-169.

Clancy, John, and Daniel P. Hughes. "New Technology for Force XXI Artillery." Army 46 (February 1996): 46-52.

Clapper, James R., Jr., and Eben H. Trevino, Jr. "Critical Security Dominates Information Warfare Moves." Signal 49 (March 1995): 71-72.

Clark, Wesley K. "Digitization: Key to Landpower Dominance." Army 43 (November 1993): 28-33.

Clodfelter, Mark, and John M. Fawcett, Jr. "The RMA and Air Force Roles, Missions, and Doctrine." Parameters 25 (Summer 1995): 22-29.

Coe, Gary Q. "Modeling Processes Offer Command and Control Aids." Signal 48 (September 1993): 67-69.

Colucci, Frank. "The Army's RAH-Comanche." Army 46 (May 1996): 38-44.

Conant, Hollyn. "Genghis Khan's Communication Network." Military Review 74 (August 1994): 65-68.

Cook, Nick. "VR (Virtual Reality): Even Better Than the Real Thing." Jane's Defense Weekly 21 (26 February 1994): 24-25.

Cooper, Pat. "C3I, Data Become Battlefield Targets." Defense News 10 (4-10 December 1995): 8, 42.

Cooper, Pat. "Communications System Links Allies." (in Bosnia) <u>Army Times</u> (26 February 1996): 27.

Cooper, Pat. "DOD Escalates War Against Computer Hackers." <u>Defense News</u> 9 (1-7 August 1994): 10.

Cooper, Pat. "Evolving IW Faces Established Military Doctrine." <u>Defense News</u> 10 (4-10 December 1995): 10.

Cooper, Pat. "In Cyberspace, U.S. Confronts an Illusive Foe." (Havoc that computer hackers can wreak) <u>Defense News</u> 10 (13-19 February 1995): 1, 37.

Cooper, Pat. "Information Laboratory Would Link C4 Efforts." <u>Defense News</u> 10 (18-24 December 1995): 3, 20.

Cooper, Pat. "Information Warfare Sparks Security Affairs Revolution." <u>Defense News</u> 10 (12-18 June 1995): 1, 66.

Cooper, Pat. "IW Study May Guide U.S. Policy: Pentagon Effort Joins Crucial Players in Data Technology." <u>Defense News</u> 11 (25-31 March 1996): 39.

Cooper, Pat. "Peacekeepers in Bosnia to Get Revamped Intelligence Feeds." (Describes the Bosnia Command and Control Augmentation System) <u>Defense News</u> 11 (22-28 April 1996): 36.

Cooper, Pat. "Pentagon Debates Potential of Information Warfare." <u>Defense News</u> 11 (13-19 May 1996): 3, 33.

Cooper, Pat. "U.S. Military Foresees Increase in Spending." <u>Defense News</u> 10 (4-10 December 1995): 16.

Cooper, Pat, and Frank Oliveri. "Hacker Exposes U.S. Vulnerability." <u>Defense News</u> 10 (9-15 October 1995): 1, 37.

Cooper, Pat, and Jason Glashow. "New U.S. Army Tenet Focuses on Info Control." <u>Defense News</u> 10 (18-24 December 1995): 12.

Cooper, Pat, and Robert Holzer. "America Lacks Reaction Plan for Info War." <u>Defense News</u> 10 (2-8 October 1995): 3, 37.

Cooper, Pat, and Robert Holzer. "Pentagon Rethinks Art of War: Studies New Role for Information Warfare." <u>Defense News</u> 10 (20-26 February 1995): 3, 28.

Cooper, Pat, and Robert Holzer. "U.S. Navy Stresses IW Training at New Facility." <u>Defense News</u> 10 (4-10 December 1995): 14.

Cooperman, Steve. "Spatial Information Management: Making the Digital Battlefield a Reality." <u>Defense Electronics</u> 27 (August 1995): 26-28.

Corbin, Lisa. "Speeding Up the Data Superhighway: Government Paves the Way for the Private Sector." Government Executive 27 (February 1995): 14-22.

Cortese, Amy "Warding Off the Cyberspace Invaders." Business Week, no. 3415 (13 March 1995): 92-93.

Covault, Craig. "Joint-STARS Patrols Bosnia." Aviation Week & Space Technology 144 (19 February 1996): 44-49.

Cunningham, W.B., and M.M. Taylor. "Information for Battle Command." Military Review 74 (November 1994): 81-84.

Cushman, John H. "Ocean Ventured, Something Gained." (Considers the problems of command and control in expeditionary forces) Proceedings - U.S. Naval Institute 118 (September 1992): 83-88.

Czerwinski, Thomas J. "Command and Control at the Crossroads." Marine Corps Gazette 79 (October 1995): 13-15.

Dade, Stephen W. "Adventures in Targeting." (during the Persian Gulf War) Marine Corps Gazette 76 (June 1992): 34-37.

Davis, Norman C. "An Information-Based Revolution in Military Affairs." Strategic Review 24 (Winter 1996): 43-53.

Debban, Alan W. "Disabling Systems, War-Fighting Option for the Future." Airpower Journal 7 (Spring 1993): 44-50.

DeGroat, Arthur S., and David C. Nilsen. "Information and Combat Power on the Force XXI Battlefield." Military Review 75 (November-December 1995): 56-62.

DeGroat, Arthur S., and Michael J. Stagoski. "Mounted Battle Command in the Information Age." Army 44 (September 1994): 10-14.

Dempster, J.B. "Objective AWACS (Airborne Warning and Control System): Boeing Vision Focused on System's Future Role." NATO's Sixteen Nations 40 (Special Issue 1995): 36-37.

Devereaux, Christopher. "Combat Leadership and the Media." Proceedings - U.S. Naval Institute 121 (July 1995): 62-65.

DiNardo, R.L., and Daniel J. Hughes. "Some Cautionary Thoughts on Information Warfare." Airpower Journal 9 (Winter 1995): 69-79.

Edwards, O.T. "Digital Battlefield Training and Tactical Insights of a User." Armor 104 (May-June 1995): 12-14.

Emmett, P.C. "Software Warfare: The Emerging Future." RUSI Journal 137 (December 1992): 56-60.

Emmett, P.C. "Software Warfare: The Militarization of Logic." JFQ: Joint Force Quarterly, no. 5 (Summer 1994): 84-90.

"Essential Military Asset for the 21st Century." (Airborne Warning and Control System) Jane's Defense Weekly 24 (18 November 1995): Supplement 1-8.

Evancoe, Paul R., and Mark Bentley. "Computer Viruses Loom as Future Era Weapons: In Offensive Mode, Electronic Contagion Can Disrupt Weapons, Other Key Military Systems." National Defense 78 (February 1994): 19-21.

Evancoe, Paul R., and Mark Bentley. "CVW--Computer Virus as a Weapon." Military Technology 18 (May 1994): 38-40.

Evers, Stacey. "Stopping the Hacking of Cyber Information." Jane's Defence Weekly 25 (10 April 1996): 22-25.

Evers, Stacey. "Unmanned Fighters: Flight Without Limits." (Article centers on the proposed Unmanned Tactical Aircraft which is "more about communications and situation awareness than it is about an airplane") Jane's Defence Weekly 25 (10 April 1996): 28-29.

Evers, Stacey. "U.S. Navy Commissions New Information Centre." (Fleet Information Warfare Center) Jane's Defence Weekly 24 (4 November 1995): p. 11.

"EW (Electronic Warfare) Expands into Information Warfare." Aviation Week & Space Technology 141 (10 October 1994): 47-48.

Farmer, Robert D. "Improving the Intelligence Analysis System." Marine Corps Gazette 79 (April 1995): 34-37.

Fialka, John J. "Pentagon Studies Art of 'Information Warfare' to Reduce Its Systems' Vulnerability to Hackers." Wall Street Journal (3 July 1995): sec. A, p. 20.

Fischer, Addison. "Security and Digital Signatures in Electronic Business." Defense Electronics 26 (August 1994): 24-26.

Fitz-Enz, Davis G. "Ready, Aim, Automate." Military Review 73 (June 1993): 57-61.

FitzGerald, Mary C. "Russian Views on Electronic Signals and Information Warfare." American Intelligence Journal 15 (Spring-Summer 1994): 81-87.

FitzGerald, Mary C. "Russian Views on Information Warfare." Army 44 (May 1994): 57-60.

Fogleman, Ronald R. "Information Operations: The Fifth Dimension of Warfare." Defense Issues 10, no. 47 (1995): 1-3.

Fowler, Charles A., and Robert F. Nesbit. "Tactical Deception in Air-Land Warfare." Journal of Electronic Defense 18 (June 1995): 37-44, 76-79.

Frackleton, Steve. "Communications System Aims to Enhance Navy Interoperability." (Describes the system called HYDRA--Hierarchical Yet Dynamically Reprogrammable Architecture) Signal 49 (January 1995): 47-49.

Frankel, Michael S. "The 1994 Army Science Board Recommended Technical Architecture for the Digital Battlefield." Army RD&A Bulletin (November-December 1994): 7-11.

Franklin, Charles E. "Jane's Interview (with LtGen Charles E. Franklin, Commander of USAF's Electronic Systems Center)." Interview by John Boatman. Jane's Defence Weekly 23 (4 February 1995): 48.

Franks, Frederick M., Jr. "Winning the Information War: Evolution and Revolution." Vital Speeches of the Day 60 (15 May 1994): 453-458.

Funk, Paul E. "The Army's Digital Revolution." Army 44 (February 1994): 33.

Fursdon, Edward. "AWACS (Airborne Warning and Control System) Prove Their Potential in Bosnia War." Asia-Pacific Defense Reporter 21 (March-April 1995): 46-47.

Gambel, Daniel W. "MLS (Multi-Level Security): Data Security for DOD and the Rest of Us." Defense Electronics 27 (June 1995): 10, 31.

Gehly, Darryl. "Controlling the Battlefield." Journal of Electronic Defense 16 (June 1993): 42-49.

Giboney, Thomas B. "Commander's Control from Information Chaos." Military Review 71 (November 1991): 34-38.

Glashow, Jason. "Army Seeks to Plug Digital Weak Spots." Army Times (22 January 1996): 27.

Glashow, Jason. "Army to Focus on System Resistance to Infiltration: Heavy Service Reliance on Computers Creates New Openings for Foes." Defense News 10 (4-10 December 1995): 16.

"Global Support System Braces Far-Flung Combat Forces." (Summary of tenth annual Asia-Pacific International Conference sponsored by Armed Forces Communications and Electronics Association) Signal 50 (February 1996): 61.

Glynn, Patrick. "Quantum Leap." National Interest, no. 39 (Spring 1995): 50-57.

"Going beyond Real-Time: The Next Step in Simulation." (Briefly describes the formation of the Navy Information Warfare Activity) Aviation Week & Space Technology 141 (12 September 1994): 71.

Goldman, Alan R., and Eric Vardac. "Threats to the New World Order." Military Intelligence 19 (January-March 1993): 42-46.

Goodman, Glenn W., Jr. "Getting the Whole Picture: Enemy Forces Can't Hide from the Joint STARS Radar." (Joint Surveillance and Target Attack Radar System) Armed Forces Journal International 133 (October 1995): 52-55.

Goodman, Glenn W., Jr. "Power of Information: Air Force Clarifies Its Misunderstood Virtual Presence Concept." Armed Forces Journal International 132 (July 1995): 24.

Goodman, Glenn W., Jr. "The Synthesis of Uncertainty: USMC Adopts 'Intuitive' Approach to Command and Control." Sea Power 38 (April 1995): 75-80.

Gourley, Scott R. "JCALS (Joint Computer-Aided Acquisition and Logistics Support)--Digital Link to a Shared Data Environment." Army 45 (May 1995): 59-61.

Gray, Colin S. "The Changing Nature of Warfare?" Naval War College Review 49 (Spring 1996): 7-22.

Gray, Jim. "Turning Lessons Learned into Policy." (Lessons learned from Operations Desert Shield/Desert Storm) Journal of Electronic Defense 16 (October 1993): 87-92.

Gregory, Thomas E. "The Cybernetic Design: Maneuver Warfare Organization for the Information Age." Marine Corps Gazette 78 (December 1994): 38-40.

Grier, Peter. "Better Eyes in the Skies." (Airborne radar programs) Air Force Magazine 77 (October 1994): 24-30.

Grier, Peter. "The Data Weapon." (Includes lessons learned in the Persian Gulf War) Government Executive 24 (June 1992): 20-25.

Grier, Peter. "Electronics and Communications: Preparing for 21st Century Information War." Government Executive 27 (August 1995): 130-132.

Grier, Peter. "GPS (Global Positioning System) in Peace and War." Air Force Magazine 79 (April 1996): 76-79.

Grier, Peter. "Information Warfare: Information May Be the Most Fearsome Weapon on the Emerging Techno-Battlefield." Air Force Magazine 78 (March 1995): 34-37.

Grimes, Vincent P. "Army Building Digital Foundation for Future: Electronically Connecting Combat Units Promises Dramatic Increase in Punch." National Defense 79 (December 1994): 16-17.

Grimes, Vincent P. "Digitized Zephyr Lifting Fog from No Man's Land: Army Pushes Information Warfare Transition forward with Tests, Organizational Changes." National Defense 80 (September 1995): 32-33.

Grimes, Vincent P. "US Army Begins Digitization Build-Up." International Defense Review 27 (August 1994): 51-54.

Guenther, Otto. "Software for Force XXI." Army RD&A (March-April 1996): 2-3.

Guenther, Otto, and Robert F. Giordano. "Enabling Technologies and Advanced Concepts for the Digitized Force XXI." Army RD&A Bulletin (November-December 1994): 21-24.

Guilbault, R.G. "Information Empowerment: The Key Force Multiplier." (Article focuses on computer security) Defense & Security Electronics 28 (January 1996): 10-14.

Hallagan, Robert E. "An Introduction to Our Intelligence Branch Operational Concept." Military Intelligence 19 (January-March 1993): 6-15, 52.

Hammes, Thomas X. "Don't Look Back, They're Not Behind You." (The author writes that "Information systems that provide new capabilities in collection, analysis, dissemination, and targeting, as well as precision weapons will be dominant factors in conflict.") Marine Corps Gazette 80 (May 1996): 72-75.

Hammes, Thomas X. "Evolution of War: The Fourth Generation." Marine Corps Gazette 78 (September 1994): 35-44.

Hamon, Dale R., and Walter G. Green. "Space and Power Projection." Military Review 74 (November 1994): 61-67.

Hanley, Colleen, and Joe Messina. "Commercial Satellite Imaging Helps DoD Maintain the Peace." Defense & Security Electronics 28 (February 1996): 28-32.

Hardy, Stephen M. "Accessing the Digital Battlefield." Journal of Electronic Defense 17 (January 1994): 31-38.

Hardy, Stephen M. "Will the GPS (Global Positioning System) Lose Its Way?" Journal of Electronic Defense 18 (September 1995): 56-58.

Hartzog, William W. "Crossing the Threshold into a New Age." Army 45 (May 1995): 21-24.

Hartzog, William W., and Susan Canedy. "Synergy for the Next Century: Force XXI to Army XXI." Army 46 (May 1996): 19-22.

Heidenrich, John G. "The Gulf War: How Many Iraqis Died?" Foreign Policy, no. 90 (Spring 1993): 108-125.

Hewish, Mark. "Airborne Electronic Warfare: The Future Is Digital and Integrated." International Defense Review 28 (June 1995): 45-57.

Hewish, Mark. "Fishing in the Data Stream: Netting Information Is the Trick." International Defense Review 27 (July 1994): 51-56.

Hewish, Mark. "Mapping Revolution: Digital Topographic Data Are Replacing Paper." International Defense Review 28 (April 1995): 40-43.

Hewish, Mark, and J.R. Wilson. "GPS (Global Positioning System) Meets New Challenges." International Defense Review 28 (October 1995): 57-62.

Holinko, Myron. "Use of the Digital Integrated Lab for Force XXI." Army RD&A (March-April 1996): 9-12.

Holzer, Robert. "Battlefield Vision Stresses Information, Speed." (Article provides overview of document entitled JOINT VISION 2010) Army Times (19 February 1996): 26.

Holzer, Robert. "U.S. Mulls Future Battlefield Vision: Evolving Plan Stresses Speed, Info Technology." (Article focuses on the document entitled JOINT VISION 2010) Defense News 11 (5-11 February 1996): 3, 48.

Holzer, Robert. "U.S. Navy Begins Information War Effort." Defense News 9 (29 August-4 September 1994): 4.

Holzman, Robert, and Neil Munro. "Microwave Weapon Stuns Iraqis." Defense News 7 (13 April 1992): 1, 52.

Horner, Charles A. "Space Systems Pivotal to Modern Warfare." Defense 94, no. 4 (1994): 20-29.

Horton, Barry. "Jane's Interview (with Barry Horton, U.S. Department of Defense principal deputy assistant secretary of defense for C3I)." Interview by Stacey Evers. Jane's Defence Weekly 25 (10 April 1996): 32.

Houghtaling, Pamela A. "New Information Warfare System Advances into Next Century: State-of-the-Art Tactical Support Configuration Improves Communications on the Battlefield." Signal 50 (March 1996): 37-39.

Howard, Patricia L. "Copernicus: 'Shifting the Center of the Universe'." Sea Power 35 (February 1992): 19-20.

Hudson, Neff. "Bosnia's Big Ears: Military Gives Communications a High-Tech Shot." Army Times (15 April 1996): 32.

Hutchison, Katherine K. "Data Security Has Roots in the DOD." Defense Electronics 27 (June 1995): S10-S14.

Hutchison, Katherine K. "Firewalls Offer Capable Internet Security Links: Avoiding a Mugging in Cyberspace Requires Dedicated Security System." National Defense 80 (July-August 1995): 58-60.

"Infrastructure Study Begins." Jane's Defence Weekly 24 (11 November 1995): 6.

Inman, Jay W. "Information and the Shift from Mass to Efficiency." Army RD&A (March-April 1996): 20-21.

"IW Squadron to Evaluate Offensive Tactics." Aviation Week & Space Technology 143 (27 November 1995): 54.

Jensen, Owen E. "Information Warfare: Principles of Third-Wave War." Airpower Journal 8 (Winter 1994): 35-43.

Johnson, Craig L. "Information Warfare--not a Paper War." (Article includes a description of the work of the Air Force Information Warfare Center) Journal of Electronic Defense 17 (August 1994): 55-58.

"Joint STARS: Ground Surveillance for NATO." NATO's Sixteen Nations (Special issue supplement) 39, no. 3-4 (1994): 32 page supplement.
> "NATO's Response to the New Security Environment: The Alliance's Ground Surveillance Capability," by Robin Beard, pp. 4-6.
> "Ground Surveillance: A Revolution Coming Our Way," General Merrill A. McPeak, p. 9.
> "Joint Surveillance Target Attack Radar System (JSTARS) in Operations," by General Frederick M. Franks, Jr., pp. 10-13.
> "Why NATO Needs Joint STARS," pp. 14-27.
> "Joint STARS - A System of Systems," pp. 28-31.
> "Joint STARS Growth Potential," p. 32.

Jones, Jeffrey B. "Psychological Operations in Desert Shield, Desert Storm, and Urban Freedom." Special Warfare 7 (July 1994): 22-29.

Jones, Jeffrey B. "Theater Information Strategies." Military Review 74 (November 1994): 48-50.

"JTIDS (Joint Tactical Information Distribution System) Passes Production Hurdle." Aviation Week & Space Technology 142 (13 March 1995): 29.

Kabay, M.E. "Prepare Yourself for Information Warfare." (Article focuses on the vulnerability of information infrastructures in the interpersonal, intercorporate, and international trading spheres) Computerworld 29 (March 1995): 2-7. UMI ProQuest, General Periodicals Ondisc, item 02301696.

Kelly, Brian J. "Command and Control Basics Enhance Explosion of Information Technology." Signal 49 (March 1995): 15-16.

Kitfield, James. "Live by the Sword, Die by the Software." (Article focuses on the School of Information Warfare and Strategy at the National Defense University, Fort McNair) Government Executive 27 (November 1995): 72.

Kitfield, James. "Trading Bullets for Bytes." (Article focuses on virtual reality and simulation) Government Executive 26 (June 1994): 19-22.

Knoth, Artur. "Disabling Technologies: A Critical Assessment." International Defense Review 27 (July 1994): 33-39.

Knowles, John. "Image Is Everything." (Imagery intelligence) Journal of Electronic Defense 19 (May 1996): 35-40.

Koch, James R. "Operation Fortitude: The Backbone of Deception." Military Review 72 (March 1992): 66-77.

Kollhoff, Ronald K. "Lessons of Operation Desert Hammer VI: Digitization Will Impact Many Areas of Training." Armor 104 (September-October 1995): 41-43.

Kraus, George F., Jr. "Information Warfare in 2015." Proceedings - U.S. Naval Institute 121 (August 1995): 42-45.

Krygiel, Annette J. "The Central Imagery Office: Getting the Picture." Defense 94, issue 4 (1994): 30-34.

Krygiel, Annette J. "Networks Enhance Tactical Warrior's Imagery Support." Signal 50 (May 1996): 65-68.

Kurzweil, Raymond. "May the Smartest Machine Win: Warfare in the 21st Century." (Article emphasizes the importance of librarians) Library Journal 118 (1 October 1993): 70-72.

Lambakis, Steven. "Space Control in Desert Storm and Beyond." Orbis 39 (Summer 1995): 417-433.

Laughridge, Gene. "Recent and Not-So-Recent Thinking on Information Operations and the Knowledge War." Army Communicator 20 (Spring-Summer 1995): 32-38.

Leach, Raymond J. "'Information' Support to U.N. Forces." Marine Corps Gazette 78 (September 1994): 49-50.

Leibstone, Marvin. "Next-Generation Soldier: Ditched, or Digitised?" Military Technology 18 (July 1994): 59-63.

Lesser, Roger. "So You Think Your Information Is Secure - Is It?" Defense Electronics 27 (May 1995): 16-19.

"Leveraging the Infosphere: Surveillance and Reconnaissance in 2020." Airpower Journal 9 (Summer 1995): 8-25.

Lewis, Raymond J. "A 40 Year Old Weapon That Could Compromise US AW (Automation Warfare)." Army Communicator 19 (Spring 1994): 19-21.

Libicki, Martin C. "What Is Information Warfare?" Strategic Forum, no. 28 (May 1995): 1-4.

Libicki, Martin C., and James A. Hazlett. "Do We Need an Information Corps?" JFQ: Joint Force Quarterly, no. 2 (Autumn 1993): 88-97.

Linton, Debbie. "The Army's Vision of Satellite Communications." Army Communicator 20 (Fall 1995): 2-6.

Longhouser, John E. "Converting Computing Power into Combat Power." Army RD&A (March-April 1996): 4-8.

Lum, Zachary A. "C2W Payloads for UAVs (Unmanned Aerial Vehicles)." Journal of Electronic Defense 18 (January 1995): 36-37.

Lum, Zachary A. "Don't Slam It, Jam It." (Electronic attack programs) Journal of Electronic Defense 19 (May 1996): 42-46.

Lum, Zachary A. "Linking the Senses." Journal of Electronic Defense 17 (August 1994): 33-38.

Lum, Zachary A. "Pump Up the Volume--Here Comes the Jam." Journal of Electronic Defense 17 (June 1994): 34-39.

Luti, William J. "Battle of the Airwaves." (Electronic warfare during Operation Desert Storm) Proceedings - U.S. Naval Institute 118 (January 1992): 49-55.

McConnell, J.M. "New World, New Challenges: NSA (National Security Agency) into the 21st Century." American Intelligence Journal 15 (Spring-Summer 1994): 7-10.

Macedonia, Michael R. "Information Technology in Desert Storm." Military Review 72 (October 1992): 34-41.

McGinnis, Michael L., and George F. Stone. "Decision Support Technology." Military Review 74 (November 1994): 68-74.

MacGregor, Douglas A. "Closing with the Enemy." Military Review 73 (February 1993): 64-71.

McHugh, Jane "Information Is Weapon of Future: Computers and High Technology Will Lead Soldiers into the Army of Force XXI." (Article focuses on the new battle dress uniform called the Land Warrior System) Army Times (15 April 1996): 26.

Mackay, Leo S. "Naval Aviation, Information, and the Future." Naval War College Review 45 (Spring 1992): 7-19.

McKenzie, Kenneth F., Jr. "Beyond Luddites and Magicians: Examining the MTR (Military Technical Revolution)." Parameters 25 (Summer 1995): 15-21.

Madigan, James C., and George E. Dodge. "Battle Command: A Force XXI Imperative." Military Review 74 (November 1994): 29-39.

Madsen, Wayne. "Intelligence Agency Threats to Computer Security." International Journal of Intelligence and Counterintelligence 6 (Winter 1993): 413-488.

Mahanna, Cory W., and James Gagliarducci. "Army Aviation Bridges Communications on the Battlefield." Military Review 75 (May-June 1995): 42-45.

Mahnken, Thomas G. "War in the Information Age." JFQ: Joint Force Quarterly, no. 10 (Winter 1995-1996): 39-43.

Mann, Edward. "Desert Storm: The First Information War?" Airpower Journal 8 (Winter 1994): 4-13.

Matthews, William. "School Is in for 'Information Warfare'." (School of Information Warfare and Strategy at National Defense University) Army Times (23 May 1994): 28.

Matthews, William. "Susceptible to Sabotage: 'Weapons of Preference' Are Vulnerable." Army Times (5 February 1996): 28.

Matthews, William. "U.S. Army Tackles Data Vulnerability: Makes Plan to Assess Threats, Strengthen Electronic Security." Defense News 11 (5-11 February 1996): 38.

Matthys, Erick T. "Harnessing Technology for the Future." Military Review 75 (May-June 1995): 71-76.

Meadows, Sandra I. "Computer System Intrusion Threat Fuels Information Security Debate." National Defense 80 (October 1995): 16-17.

Meadows, Sandra I. "High-Tech Commo, Sensors Bolster U.S., Allied Peacekeeping in Bosnia." National Defense 80 (March 1996): 18-19.

Meadows, Sandra I. "Information Warriors Raze Enemy's Vital Data Chains: Tactical Commanders Are Increasingly Vulnerable to Information-Based, System-Disabling Weapons." National Defense 79 (March 1995): 30-31.

Meadows, Sandra I. "Multimedia Tools Abet Army Pursuit of Digital Battlefield." National Defense 80 (January 1996): 30-31.

Meadows, Sandra I. "Satellite Links Bestow Commanders with Split-Second Combat Spectacle." National Defense 79 (March 1995): 24-25.

Menoher, Paul E. "Force XXI: Redesigning the Army through Warfighting Experiments." Military Intelligence 22 (April-June 1996): 6-8.

Menoher, Paul E. "Tailoring Intelligence to Meet the Needs of Force XXI." Army 45 (October 1995): 121-126.

Menoher, Paul E. "Where Do We Go from Here?" American Intelligence Journal 15 (Spring-Summer 1994): 11-14.

Metzgar, Terry. "Hostile Intercepts Aimed at Information Systems." National Defense 77 (May-June 1993): 24-26.

Miller, John E., and Kurt C. Reitinger. "Force XXI Battle Command." Military Review 75 (July-August 1995): 5-9.

"Milstar (Military Strategic and Tactical Relay System): Switchboard in the Sky." Army 45 (December 1995): 21.

Minihan, Kenneth A. "Information Dominance: Meeting the Intelligence Needs of the 21st Century." American Intelligence Journal 15 (Spring-Summer 1994): 15-19.

Morris, Chris, Janet Morris, and Thomas Baines. "Weapons of Mass Protection: Nonlethality, Information Warfare, and Airpower in the Age of Chaos." Airpower Journal 9 (Spring 1995): 15-29.

Mowery, Beverly P. "Information Determines the Battlespace as World Changes Camouflage Threats." (Presents highlights of the discussions at the Armed Forces Communications and Electronics Association Western Conference and Exposition, held in January 1996) Signal 50 (April 1996): 65-69.

Mowery, Beverly P. "Technology Opens New Strategies for Future Battlefield Operations." Signal 48 (August 1994): 61.

Munro, Neil. "The Pentagon's New Nightmare: An Electronic Pearl Harbor." Washington Post (16 July 1995): sec. C, p. 3.

Munro, Neil. "U.S. Boosts Information Warfare Initiatives: Pentagon Fears Enemy Electronic Attacks." Defense News 8 (25 January 1993): 1, 30.

"Navy System to Halve Strike Planning Time." Aviation Week & Space Technology 142 (27 March 1995): 48-49.

Naylor, Sean D. "Digitized Force: Better, but not Smaller." Army Times (23 October 1995): 12, 32-33.

Naylor, Sean D. "Info War: 'Digitization' Will Shape How Future Wars Are Fought." Army Times (17 May 1993): 12-14.

Newman, Harry T. "The First Information War." (Review of the book entitled The First Information War, edited by Alan D. Campen) American Intelligence Journal 15 (Spring-Summer 1994): 77-79.

Noble, Earl D., and Kurt A. Meisenzahl. "AFTADS (Advanced Field Artillery Tactical Data System): The FA's (Field Artillery's) Doorway to the Digital Battlefield." Field Artillery (September-October 1995): 36-39.

Nowowiejski, Dean A. "Achieving Digital Destruction: Challenges for the M1A2 Task Force." Armor 104 (January-February 1995): 21-24.

Nye, Joseph S., Jr., and William A. Owens. "America's Information Edge." Foreign Affairs 75 (March-April 1996): 20-36.

Oder, Joseph E. "Digitizing the Battlefield: The Army's First Step to Force XXI." Army 45 (May 1994): 36-42.

Oliveri, Frank. "U.S. Air Force Steps Up Battle Against Intruders: IW Defense Includes Upgrades, Base Training." Defense News 10 (4-10 December 1995): 12.

O'Mara, Raymund E. "The Global Geospacial Information Era Has Begun." Defense 94, issue 4 (1994): 35-37.

Opall, Barbara, and Neil Munro. "Pentagon Official Says U.S. Arms Technology Far Outpaces Doctrine." Defense News 7 (7-13 December 1992): 20, 31.

Owens, William A. "Jane's Interview (with ADM William A. Owens, vice chairman of the U.S. Joint Chiefs of Staff)." Interview by John Boatman. Jane's Defence Weekly 24 (5 August 1995): 32.

Owens, William A. "System-of-Systems: US' Emerging Dominant Battlefield Awareness Promises to Dissipate the 'Fog of War'." Armed Forces Journal International 133 (January 1996): 47.

Paige, Emmett, Jr. "From the Cold War to the Global Information Age." (Article centers on command, control, communications, computers and intelligence) Defense Issues 10, no. 34 (1995): 1-4.

Paige, Emmett, Jr. "Retaining the Edge on Current and Future Battlefields." Defense Issues 10, no. 85 (1995): 1-4.

Peters, Ralph. "The Movable Fortress: Warfare in the 21st Century." Military Review 73 (June 1993): 62-72.

Petersen, John H. "Info Wars." Proceedings - U.S. Naval Institute 119 (May 1993): 85-92.

Peterson, Donna. "GAO (General Accounting Office) Hits Digital Program." Army Times 1 January 1996): 7.

Polmar, Norman. "Here's Looking at You, Boris." (Reconnaissance Satellites) Proceedings - U.S. Naval Institute 121 (December 1995): 87-88.

Rackham, Peter. "Uniting the Tower of Babel." Jane's Defence Weekly 22 (22 October 1994): 26-28.

Reitinger, Kurt C. "Command and Control for Third Wave Warfare." Army 45 (February 1995): 9-14.

Riccardelli, Richard F. "The Information and Intelligence Revolution." Military Review 75 (September-October 1995): 82-87.

Rigby, Joe W. "Acquiring the Digitized Force." Army RD&A Bulletin (November-December 1994): 16-17.

Rigby, Joe W. "Digitizing Force XXI: A Team Effort." Army 45 (May 1995): 36-44.

Rigby, Joseph W. "The US International Digitization Strategy." International Defense Review 28 (November 1995): 28-32.

Rip, Michael R. "How Navstar (the Navstar Global Positioning System) Became Indispensable." (Article focuses on the importance of Navstar during Operation Desert Storm) Air Force Magazine 76 (November 1993): 46-49.

Robb, Stephen C. "Marine Corps Signal Intelligence 'The Warfighter's Force Multiplier'." American Intelligence Journal 15 (Spring-Summer 1994): 25-29.

Robinson, Clarence A., Jr. "Activating Firewall Security Lulls Attackers, Strikes Back." Signal 50 (October 1995): 32-34.

Robinson, Clarence A., Jr. "Aerial Intelligence Collection Decisively Sways Operations: Unmanned Vehicles Play Greater Tactical Role, but Congress Questions Platform Proliferation." Signal 50 (September 1995): 20-23.

Robinson, Clarence A., Jr. "Army Morphs Air Defense Artillery: Forward Area Air Defense Sensors Provide Command, Control Digital Integration of Battlefield Links." Signal 50 (January 1996): 36-41.

Robinson, Clarence A., Jr. "Army Plan Fosters Dynamic Information War Framework: Fundamental Changes in C4I Stimulate Post-Cold War Information Management." Signal 48 (November 1993): 55-58.

Robinson, Clarence A., Jr. "Army Views Combat Future in Digital Battlefield Tempo: Mounted Battlespace Laboratory Seeks Combined Arms Modernization Tied to Information Systems." Signal 48 (May 1994): 27-34.

Robinson, Clarence A., Jr. "Battle Group Commands Draw Terrestrial Networks Offshore." Signal 50 (November 1995): 33-36.

Robinson, Clarence A., Jr. "Commanders Pull Intelligence Information Warfare Strategy." Signal 48 (August 1994): 29-31.

Robinson, Clarence A., Jr. "Defense Organization Safeguards War Fighters' Information Flow." Signal 50 (October 1995): 15-18.

Robinson, Clarence A., Jr. "Digital Information Nodes Establish Force Dominance: Battlefield Command and Control's Central Role Key to Emerging Army Modernization." Signal 48 (May 1994): 45-48.

Robinson, Clarence A., Jr. "Digital Intelligence Extends Army Force Projection Power." Signal 48 (August 1994): 33-35.

Robinson, Clarence A., Jr. "Electronic Combat Techniques Provide Information War Edge: High Data Rate Waveforms, Passive Sensors Provide Versatile, Low-Cost U.S. Protection, Communication." Signal 49 (July 1995): 33-35.

Robinson, Clarence A., Jr. "Electronic Systems Center Meets Operator's Demands: Technology to Develop, Field and Manage 150 C4I Systems Helps Commanders Make, Pass Decisions." Signal 49 (March 1995): 29-32.

Robinson, Clarence A., Jr. "Encryption Issues Dominate Information Warfare Defenses." Signal 50 (May 1996): 34.

Robinson, Clarence A., Jr. "Firewall Consortium Expands Cyberspace Security Sagacity: Hardware, Software Trust Moves toward All-Computer Data Protecton, All-Network Host Computer Protection." Signal 50 (March 1996): 17-20.

Robinson, Clarence A., Jr. "Foxhole-to-Pentagon Channel Target of U.S. Army Command." Signal 47 (April 1993): 15-18.

Robinson, Clarence A., Jr. "Geospatial Information Pinch Creates Digital Balancing Act." Signal 50 (November 1995): 45-49.

Robinson, Clarence A., Jr. "High Data Rate Analog, Digital Security Emerges." Signal 50 (March 1996): 19.

Robinson, Clarence A., Jr. "Imagery, Mapping Agency's Client Focus Drives Agility." (Article focuses on National Imagery and Mapping Agency, slated to become operational by 1 October 1996) Signal 50 (April 1996): 39-42.

Robinson, Clarence A., Jr. "Information Dominance Edges toward New Conflict Frontier." Signal 48 (August 1994): 37-40.

Robinson, Clarence A., Jr. "Information Warfare Strings Trip Wire Warning Strategy: Modern Technology Infrastructure Consolidates, Provides Single Electronic Backbone, Network." Signal 50 (May 1996): 29-33.

Robinson, Clarence A., Jr. "Knowledge-Age Strategies Propel Software over Steel." (Article especially focuses on the thinking of Alvin Toffler) Signal 48 (April 1994): 49-51.

Robinson, Clarence A., Jr. "Marines Add Knowledge-Based Warrior Demonstration Wrinkle." (Joint Warrior Interoperability Demonstration 1995) Signal 49 (August 1995): 33-37.

Robinson, Clarence A., Jr. "Military Information Systems Drive Army Command, Control." Signal 49 (March 1995): 19-22.

Robinson, Clarence A., Jr. "Modern Battlefields Demand Stalwart Industry Practices: Ubiquitous Military Imagery, Mapping, Navigation Rest on Geospatial Information, Internet-Like Pull." Signal 50 (April 1996): 43-46.

Robinson, Clarence A., Jr. "Powerful Battlefield Forces Exploit Space-Based Access: Satellite Communications Promise Hugh Advances in War Fighter Communications." Signal 50 (March 1996): 33-35.

Robinson, Clarence A., Jr. "Redundancy, Robustness Protect Vital National Information Links: Increased Awareness of Risks Is Initial Step in Detecting, Reacting to Information Warfare Attack." Signal 50 (May 1996): 36-39.

Robinson, Clarence A., Jr. "Risk Management Provides Vital Information Security: Operational Analyses, Standardized Processes Control Pitfalls Across Breadth of Business." Signal 49 (October 1994): 25-28.

Robinson, Clarence A., Jr. "Unmanned Surveillance Vehicle Grabs Over-the-Horizon Imagery." (Predator Unmanned Aerial Vehicle) Signal 50 (September 1995): 15-18.

Robison, Thomas W. "Pipeline Vision for Force XXI." ("Digitization of the battlefield will provide logisticians awareness of the maneuver commander's location and logistics requirements.") Army Logistician (July-August 1995): 22-25.

Rohde, William E. "What Is Information Warfare?" Proceedings - U.S. Naval Institute 122 (February 1996): 34-38.

Romine, B. Harl. "Intelligence Data for Tactical Commanders." American Intelligence Journal 15 (Spring-Summer 1994): 30-38.

Roos, John G. "'God's-Eye' View of Air Combat: Data Links a Boon in Joint-Service, Multinational Operations." Armed Forces Journal International 132 (January 1995): 12.

Roos, John G. "InfoTech InfoPower." Armed Forces Journal International 131 (June 1994): 31-36.

Ropelewski, Robert. "Army Shifts Modernization Effort from Embedded to Upgraded Approach." Signal 49 (November 1994): 43-46.

Ropelewski, Robert. "Command, Control Priorities Shift, Steady Funding Persists." Signal 50 (May 1996): 41-44.

Ropelewski, Robert. "US Army/Air Force JSTARS (Joint Surveillance and Target Attack Radar System) in Production." Interavia 49 (March 1994): 56-58.

Ross, Jimmy D. "Winning the Information War." Army 44 (February 1994): 26-32.

Rothrock, John. "Information Warfare: Time for Some Constructive Criticism." American Intelligence Journal 15 (Spring-Summer 1994): 71-76.

Ryan, Donald E., Jr. "Implications of Information-Based Warfare." JFQ: Joint Force Quarterly, no. 6 (Autumn-Winter 1994-1995): 114-116.

Saint, Crosbie E., and Ronald L. Watts. "Comanche Era Fleet: A Combat Multiplier." Military Review 75 (May-June 1995): 39-47.

Schwartau, Winn. "'Defense in Depth' for Information Systems Survival." International Journal of Intelligence and Counterintelligence 8 (Summer 1995): 229-234.

Scott, William B. "Global Broadcast Potential Explored." Aviation Week & Space Technology 144 (5 February 1996): 61-62.

Scott, William B. "'Information Warfare' Demands New Approach." Aviation Week & Space Technology 142 (13 March 1995): 85-88.

Scott, William B. "JTIDS (Joint Tactical Information Distribution System) Provides F-15Cs 'God's-Eye View'." Aviation Week & Space Technology 144 (29 April 1996): 63.

Scott, William B. "U.S. Deploys Advanced Satcom in Bosnia." Aviation Week & Space Technology 144 (13 May 1996): 55-57.

"Shaping Force XXI Engineers." Engineer 25 (April 1995): 2-10.

Sherman, Jason. "Rush to Digitization: Has the Electronic Battlefield Been Oversold?" Armed Forces Journal International 133 (February 1996): 40-42.

Singley, George T., III. "Today's Investments Shape Tomorrow's Force." Army 45 (May 1995): 46-58.

Smith, Edward A., Jr. "Putting It through the Right Window." (Author says that "We can put a Tomahawk missile through the window of any building we choose, but only precise intelligence will tell us which window in which building must be hit at what time to meet our objectives.") Proceedings - U.S. Naval Institute 121 (June 1995): 38-40.

Snell, Albert E., and Edward J. Keusenkothen. "Mass Destruction Weapons Enter Arsenal of Terrorists: Nuclear, Chemical, Biological, and Computer Virus Devices May Be Next Weapons of Choice." National Defense 79 (January 1995): 20-21.

"Special Report: After the Storm." (Operation Desert Storm) 19 articles. Signal 45 (August 1991): 15-85.

Stankiewicz, Paul R. "Psyop: Winning Wars by Saving Lives." Asia-Pacific Defense Forum 17 (Winter 1992-1993): 8-14.

Starry, Michael, and Kevin LaMar. "It's Not the Same Old Army: A New World Demands a New Force." Armed Forces Journal International 133 (October 1995): 38-42.

Stein, George J. "Information Warfare." (Author defines information warfare and considers the factors necessary in developing information warfare strategy and doctrine) Airpower Journal 9 (Spring 1995): 30-39.

Stevens, Thomas F. "Cryptology from the Sea." American Intelligence Journal 15 (Spring-Summer 1994): 21-24.

Stewart, John F., Jr. "Command and Control Warfare and Intelligence on the Future Digital Battlefield." Army RD&A Bulletin (November-December 1994): 14-15.

Stix, Gary. "Fighting Future Wars." Scientific American 273 (December 1995): 92-98.

Struble, Dan. "What Is Command and Control Warfare?" Naval War College Review 48 (Summer 1995): 89-98.

Sullivan, Gordon R. "The Army is Leading the Way." Interview by Mary B. French and John E. Grady. Army 44 (May 1994): 28-34.

Sullivan, Gordon R. "Force XXI: Digitizing the Battlefield." Army RD&A Bulletin (November-December 1994): 2-3.

Sullivan, Gordon R. "Moving into the 21st Century: America's Army and Modernization." Military Review 73 (July 1993): 2-11.

Sullivan, Gordon R. "'A New Force for a New Century'." Army 44 (May 1994): 24-26.

Sullivan, Gordon R., and James M. Dubik. "War in the Information Age." Military Review 74 (April 1994): 46-62.

"A Survey of Defence Technology: The Software Revolution." Economist 335 (10 June 1995): 20 page supplement following page 50.

Sweetnam, J.P. "New Thinking in the US Army: The Louisiana Manoeuvres, Battle Laboratories and the Third Wave Army." Canadian Defence Quarterly 24 (September 1994): 23-28.

Swett, C. "Review Essay: War and Anti-War." Special Warfare 8 (January 1995): 26-31.

Szafranski, Richard. "Neocortial Warfare? The Acme of Skill." Military Review 74 (November 1994): 41-55.

Szafranski, Richard. "Theory of Information Warfare: Preparing for 2020." Airpower Journal 9 (Spring 1995): 56-65.

Tapscott, Mark. "New Pictures Emerging in Battlefield Intelligence." Defense Electronics 25 (April 1993): 31-38.

Tenalio, Michael J. "Digital Camera Systems Come to the Battlefield." <u>Defense Electronics</u> 27 (April 1995): 8.

Thach, Liz, and Richard W. Woodman. "Organizational Change and Information Technology: Managing on the Edge of Cyberspace." <u>Organizational Dynamics</u> 23 (Summer 1994): 30-46.

Thomas, Charles W., and Cary C. Harbaugh. "The Military Intelligence Vision for the XXI Century." <u>Military Intelligence</u> 22 (April-June 1996): 9-13.

Thompson, Mark. "If War Comes Home: A Strategic Exercise Simulates an Info Attack on the U.S. and Its Allies." <u>Time</u> 146 (21 August 1995): 44-46.

Tigner, Brooks. "New Missions, Economies Threaten NATO System." (Article centers on the security of NATO's command and control and information systems) <u>Defense News</u> 10 (4-10 December 1995): 8.

"Training on the Digitized Battlefield." <u>Armor</u> 103 (January-February 1994): 37-39.

Vincent, Gary A. "A New Approach to Command and Control: The Cybernetic Design." <u>Airpower Journal</u> 7 (Summer 1993): 24-38.

Wade, Nicholas. " Method & Madness: Bytes Make Right." (Article focuses on changes in warfare brought about by technological advances) <u>New York Times Magazine</u> (12 March 1995): 28-30.

Waller, Douglas. "Onward Cyber Soldiers." <u>Time</u> 146 (21 August 1995): 38-44.

Wallich, Paul. "Wire Pirates." (Security vulnerabilities of the Internet) <u>Scientific American</u> 270 (March 1994): 90-101.

Walsh, Edward J. "Copernican Revolution: US Navy Leads the C4I Way for Joint Operations." <u>Armed Forces Journal International</u> 132 (July 1995): 40-42.

Walsh, Edward J. "Dramatic Movement Closes in on Global Command and Control." (Article focuses on the new global command and control system -- GCCS) <u>Signal</u> 50 (May 1996): 49-52.

Walsh, Edward J. "An Emphasis on Core Competencies: Navy Shapes New C4I Vision for Joint Operations." <u>Sea Power</u> 38 (April 1995): 43-50.

Walsh, Edward J. "Navy Aims at Joint Operations Roles and Economies for C4I." <u>Sea Power</u> 37 (April 1994): 49-56.

Walsh, Edward J. "Navy Drives Development for Joint Command-Control 'Vision'." <u>Sea Power</u> 37 (August 1994): 25-26.

Walsh, Edward J. "Tactical C4I System Blends, Fortifies Fleet Operations." <u>Signal</u> 49 (December 1994): 49-52.

Walsh, Robert S. "Information Enhancement on Today's Battlefield." Marine Corps Gazette 79 (October 1995): 27-29.

Walters, Stewart. "Attack Helicopter: The Key Weapon in the Digital Battlefield." Asian Defence Journal, no. 7 (July 1995): 41-44.

Wardynski, E. Casey. "The Labor Economics of Information Warfare." Military Review 75 (May-June 1995): 56-61.

Webb, Robert C., and others. "Commercial and Military Satellite Survivability Crisis." Defense Electronics 27 (August 1995): 21-25.

"Why Can't We Talk?" 4 articles. Proceedings - U.S. Naval Institute 121 (January 1995): 64-71.

Williamson, John. "Winning the Data War." Jane's Defence Weekly 23 (20 May 1995): 44-46.

Wilson, G.I., and Frank Bunkers. "Uncorking the Information Genie: The Ability to Collect and Process Information More Efficiently Than the Opposition Is a Must for the Corps in the Emerging Information Age." Marine Corps Gazette 79 (October 1995): 29-31.

Wilson, J.R. "Commanding View: The US Military Has Ambitious Plans for Space-Based Communications, Surveillance, and Perhaps Even Offensive Operations, in the 21st Century." International Defense Review 28 (January 1995): 22-27.

Winnefield, James A., and Dana J. Johnson. "Unity of Control: Joint Air Operations in the Gulf." JFQ: Joint Force Quarterly, no. 1 (Summer 1993): 88-99.

Wolf, James R. "Implications of Space-Based Observation." Military Review 74 (April 1994): 75-85.

Wood, John R. "Lessons Learned in Information Warfare." Army 46 (February 1996): 32-44.