FIRST INTERNATIONAL SYMPOSIUM

"NATIONAL SECURITY AND NATIONAL COMPETITIVENESS

OPEN SOURCE SOLUTIONS."

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When I came to defense intelligence in 1981, my first major assignment was to serve as editor in chief of a new publication that would become one of the better-read official open source documents in the world. That publication -- Soviet Military Power -- over 10 successive editions would provide annual unclassified, indeed officially declassified, updates on the strategic and conventional forces of the Soviet Union, from their buildup in the early and mid-80s to their transition in the late 80s and early 90s first with the collapse of the Warsaw Pact and then the impending dissolution of the USSR.

NATO Allies, friends and allies around the world used the document. When Secretary of Defense Cheney dropped in on a committee of the Supreme Soviet in session in 1990, one of the committee members was waving a copy of the 1990 edition in support of his argument.

Earlier in my career, from 1963-to-1966, I had been the editor of an even more enduring, extremely valuable open-source publication, the United States Naval Institute Proceedings. Thinking about my meeting with you today, I randomly selected one of the issues from that time, the September 1964 Proceedings. I was not disappointed. Its contents by article title included:

-- The East European Alliance System, written by a Naval War College Professor

-- Protection of Merchant Shipping, by an active-duty Lieutenant Commander

-- An Approach to ASW, by a Lieutenant Commander

-- Data Processing in Personnel Management, by a Navy Captain

-- The Chinese Communist Navy, by another active-duty Captain,

-- Cost Effectiveness, Fact and Fancy, by a Commander

-- Rocket Development (an history) by a Navy Captain, and

-- a pictorial essay on the Indian Head Maryland Naval Propellant Plant with brilliant, detailed photography examining the plant's internal and external layout and the processes involved for the propellants used in ZUNI rockets, ASROC and the Polaris missile

This was an issue, as are most issues of the Proceedings, that would be read and referenced by good friends and adversaries in many many countries.

Freedom of the press is at the core of our democracy. The free flow of ideas is central to our resilience, evolution and strength as a people and nation. We are better informed, better served as a military profession and as a democracy because of our open discussion of issues that would be considered too sensitive or classified in other nations. One other result, as we all

appreciate, is that the United States for decade after decade has been an unprecedented source of open source information for other nations and they have attempted to use that information to maximum advantage. I say attempted because given the incredible volume of open source information available, the challenge for them has been to narrow the field, to understand their sources, and to exercise professional care in the information selected for further reading, reference and analysis.

A few years ago, one of Canada's attaches assigned to Washington was quoted in the Washington Post as saying "You get so much information you don't know what to do with it. Starting with the paper in the morning, you get choked."

And this is the challenge for us today, in defense intelligence as elsewhere in the national community:

-- to appreciate fully the critical changes in the world transforming closed societies into more open societies where information of interest, of importance to us is now openly available -- if, if we are aware of its existence

-- training ourselves to discover and use emerging open sources,

-- training ourselves to rework our professional fields with the keen awareness that there have been and continue to be invaluable sources of open information that we have either been ignorant of or have discarded in favor of seemingly more exotic classified sources of information

-- learning to avoid tangential excursions, to avoid choking

on this new wealth of open source information

-- engaging government, the academic and research communities and the private sector to maximize our talents, our capabilities, our successes in using open source information.

In fact, within defense intelligence today, open source intelligence plays a significant role in finished intelligence production both in its own right and in conjunction with information from other sources. It has proven essential to intelligence analysis and operations. It provides unique information, it provides complementary and confirming information in support of the defense intelligence mission.

In our business, it is fun, truly a pleasure to see our professionals "twig" to this marvelous "INT". One of our analysts was working a critical problem, using other sources and had reached a juncture in his analysis at which he had two alternative paths to pursue. He was looking at a photograph of some buildings and could not determine what one of them was . The building had an unusual architectural feature that made it stand out. He showed the photo to a colleague, asked if he had ever seen anything that looked like it. The other analyst looked at the photo and said, 'you know, I believe I have seen that somewhere.' He went back to his office and dug through some open

source journals he had been looking at -- and there it was! Not only was there a clear picture, but the picture had a caption that identified the purpose of the building. EUREKA!!

A principal open source strength of defense intelligence is the scientific and technical intelligence information services program which had its genesis in an early 1960's program at the Air Force's Foreign Technology Division -- today the Foreign Aerospace Science and Technology Center. Major components of the program include CIRC, the automated, predominantly open source data base of foreign scientific and technical information references and abstracts; The Foreign Languages Program, a major component of which is the machine translation program; and the information services activities at each of the Defense Scientific and Technical Intelligence Centers. Taken together, this program provides a very professional repository, a source of considerable experience and expertise in dealing with open source information which will serve defense intelligence and the intelligence community at large in good stead. This is the case for the future developing of community open source functional support centers for scientific and technical intelligence at the Foreign Aerospace Science and Technology Center. It is the case for general military intelligence at DIA.

As an illustration of the growth of the CIRC data base -- in 1968, the data base contained in 1.2 million records; it now

contains over 10 million, about 6 million being open source records. There were seven user organizations initially, and now there are over a hundred, including intelligence community components, other government agencies, and government contractors.

Another defense intelligence open source strength resides in the broad, worldwide defense intelligence collection infrastructure. Both Service and DIA capabilities include activities that can and do acquire open source information such as foreign S&T publications and materials, publications containing information concerning foreign weapons systems, training and doctrine manuals, military organization and planning documents, maps and town plans, and other materials useful for contingency planning or otherwise responsive to defense information requirements.

Still, another defense intelligence capability is DODIIS - the DoD Intelligence Information System -- which is the foundation for the infrastructure that will provide our capability to place open source data where needed and in formats that are useable by analysts and warfighters. Fortunately, much of this foundation, which will be integral to the community's broader architecture and open source information exchange, has already been built or is underway.

I mentioned being a producer of open-source information. At another point, in the 1970s I was a consumer on the NSC and White House staffs. Bulletins, fast-breaking news can be of critical importance to Presidents, the policy level of government.

In those days, before CNN, the wire service reports flowing through the White House Situation Rom -- AP, UPI, Reuters, Agence France Press -- were monitored as closely as the classified intelligence traffic. They were the cutting edge, the tip off, the current information. Today, of course, we are well into the electronic, video era -- an era in which CNN cameras capture cruise missiles in combat, en route to their targets.

In Defense Intelligence we are part of this era. We are pioneering in the community with our classified Defense Intelligence video Network. We are pioneering with video flow of intelligence in JWICS -- the Joint Worldwide Intelligence Communications System. We are working hand in hand with the Foreign Broadcast Information Service, FBIS, drawing on their television collection capabilities at the same time that we continue to draw on their voice and print capabilities. In the video field, we are developing a global capability for I&W, current intelligence, the sharing of data at the national theater and component levels. This is a growth area for defense intelligence -- open source is central to our capabilities.

Returning to the changes around the world, indeed, returning to the reason for this first symposium, new world realities -- the recent collapse of authoritarian regimes in the former Soviet Union and Eastern Europe, political liberalization elsewhere in the world, advances in media production and dissemination technologies, and the increasing commercialization of information -- have resulted in more available and accessible open source information than ever before. We stand, in essence, at the beginning of the open source information age. The availability and value of open source information to defense intelligence will continue to grow as will its contribution in comparison to higher cost, collection systems and methodologies. As budgets shrink and defense intelligence resources are adjusted, open source data will be invaluable for continued monitoring of military forces, military facilities, military developments around the world and for the analysis and flow of intelligence required by the operator for effective and timely responses to them.

As Bill Studeman has reported, in 1992, the Director of Central Intelligence established the position of Intelligence Community Open Source coordinator. Paul Wallner, one of DIA's senior executives, was selected for that new position, and defense intelligence is playing an important role in the development and implementation of the DCI's open source strategic plan. To this end and to ensure that all defense intelligence efforts follow a common path, we have developed a strategy for open source as a

unique entity within the General Defense Intelligence Program. This strategy is intended to build on existing strengths, address critical shortfalls, and, in general, to support and leverage the community plan in meeting defense intelligence requirements.

Defense intelligence has a significant number of strengths on which we and the larger intelligence community can build for the future. We have significant challenges still to be met.

Taking stock of our capabilities, most open source material remains in hardcopy and there does not exist a widely-available, on-line index and catalogue of available open source information. Current capabilities remain predominantly aimed at the production and dissemination of hardcopy products. To make the huge amount of open source information available to users, we must foster the use of electronic media by the producers of open source information, convert paper products to electronic ones, and disseminate the information electronically to national and tactical users.

Our automated tools do not provide sufficient capabilities for data retrieval and extraction to cope with current, yet alone, the future "infoglut" which plagues defense intelligence analysts. A related problem is the need for higher volume, more reliable scanning and optical character recognition systems to aid in the capture of open source information. And finally,

current machine translation capabilities are not adequate for the diversity of foreign language material of interest to General Defense Intelligence Program users and customers.

To build on our strengths and to address our shortfalls, we have established the following GDIP priorities for the open source program over the remainder of this decade:

First, maintain current capabilities as a baseline for the GDIP open source program.

Second, make careful investments to redress fundamental shortfalls in the infrastructure and automated tools.

Third, establish a coherent management structure. As a first step, we are forming a GDIP open source steering group that will be chaired by a representative of the functional manager for scientific and technical intelligence and who will also serve as the GDIP Open Source Program Manager. Standing members of the steering group will be representatives from the other functional managers, the Services and DIA.

Fourth, improve acquisition and collection capabilities.

Finally, under the auspices of the Community's Strategic Plan, fully implement functional support centers, or "storefronts" for science and technology and for general military

intelligence.

In summary, the involvement and commitment of defense intelligence to open source information has had a long, and productive history. The improvements we intend to make to increase our access to and use of this valuable resource should provide not only the defense establishment but also the government at large with a significantly improved return on its investment in open source. We look forward to meeting these exciting new challenges and to the role of defense intelligence as an integral component of the overall intelligence community effort.

FIRST INTERNATIONAL SYMPOSIUM: NATIONAL SECURITY & NATIONAL COMPETITIVENESS: OPEN SOURCE SOLUTIONS Proceedings, 1992 Volume II - Link Page

Previous	OSS '92 Admiral Bill Studeman, Deputy Director of Central Intelligence, Teaching the Giant to Dance: Contradictions and Opportunities in Open Source Exploitation within the Intelligence Community,
Next	OSS '92 Paul Strassmann, Director of Defense Information, Forcing Innovation, Cutting Costs, and Increasing Defense Productivity: Open Source Solutions,

Return to Electronic Index Page