

# "Computer: Access the Arms Sales Database" Internet Information: Doing Better With What We Have<sup>1</sup>

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## Introduction

The paper by Gerd Hagemeyer-Gaverus serves as an excellent jump off point to discuss the information needs of international relations and security researchers in the future. His paper can be said to address how to improve the collection and organization process in the future. I would like to address a slightly different aspect: how best to use existing computerized and Internet resources for the benefit of both the researcher and the public. Although I do not have the years of experience in the field that many of you have, my comments are of use because they are based on what is now over one year's worth of experience running an online Internet site devoted to the conventional arms trade. This is essentially a straightforward gopher site (accessible at <http://www.cdi.org/atdb>).

I believe we all recognize that the unique characteristics of the international arms trade have always made research difficult. This trade cuts across many different issues. As Keith Krause noted, "the arms transfer and production system is located at the intersection of three important sets of concerns (or sets of forces for change) in international relations that are seldom considered together. These can be called 'wealth', 'power' and 'war'."<sup>2</sup> The intersection of these forces creates a multitude of relevant issues. The only hope we have of comprehensively researching all these issues and how they impact the world is through better use of computerized networks. I do not see any other viable option.

While most of my comments deal with U.S. sources and problems within the U.S. community, I believe the problems described and lessons to be derived from them are globally applicable.

## Problems

One of the problems facing the non-governmental organization [NGO] community is the same problem facing everyone else; money or lack thereof. In what seems an era of perpetual downsizing the same group of nonprofits are constantly chasing after, and scheming how to get a piece of a shrinking pool of dollars, whether it be grant funding or direct donations. This in itself is not unusual but it reinforces a tendency that already exists: namely, not to share information, resources, or agree to a division of labor; something mentioned by Gerd. Many groups are still reluctant to share the information they produce out of fear that they are aiding a competitor group or giving their information away for free. The result of all this is that many

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NT system. Thus some of the URLs given in the footnotes may change in the future.

<sup>2</sup> Keith Krause, *Arms and the State: Patterns of Military Production and Trade* (Toronto: University of Cambridge, 1992), p. 2.

different groups are constantly reinventing the wheel.<sup>3</sup> They put up web sites, which often do not have much original content. Worse, they all post the same information from governmental sources, i.e. Defense Dept., State Dept. U.S. Information Agency, Voice of America, et cetera. In the meantime, because there is no clear division of labor, much useful information remains unaccessed. If I had the time I would be digging around many of the relatively unexplored military web sites, such as the U.S. Army War College's Strategic Studies Institute, U.S. Army's Foreign Military Studies Office,<sup>4</sup> National Defense University, Fedworld, Defense Technical Information Center et cetera. But I do not have time, and as far as I can see neither does anyone else.

The above is not a criticism of other groups. Rather it is a criticism of the process. To paraphrase Benjamin Franklin, until we learn to routinely and automatically share our research we will all hang separately. And I believe that when we do start to share in a much more coordinated way we will find that our productivity will increase exponentially.

A second concern, is that we are not making the best use of information that is out there. For example, we know that the issue of small arms/light weaponry is of increasing concern. But to the best of my knowledge nobody in my country, the United States, has gone to the Bureau of Alcohol, Tobacco and Firearms and made an effort to collect, digitize, and put online what must be voluminous information from their archives. For that matter nobody is even checking in regularly with their web site<sup>5</sup> to see if there is useful information that can be downloaded.

Similarly, we know that black/grey market arms transfers are a significant problem, but has anyone tried putting up information from the files of the Strategic Investigations Division, United States Customs Service? Not that I have seen. Has anyone filed Freedom of Information Act (FOIA) requests for info from the CIA's Nonproliferation Center? No. Is anyone making an effort to go to leading researchers in this area: Ed Laurance of the Monterey Institute of International Studies, Lucy Mathiak of the University of Wisconsin, Chris Smith and other researchers from the Arms Project, and trying to collect notes from their past case studies? Again, the answer is no.

A related problem is that those primary governmental sources which do have an Internet presence have not put up all their relevant information. For example, the annual report of the U.S. Arms Control and Disarmament Agency, "World Military Expenditures and Arms Transfers," is now online.<sup>6</sup> But only the latest version is available. Even though the figures in previous versions are superseded by the latest edition, it would be preferable to have previous reports online as well, if only to be able to read the essays as well as to see how the rankings have been affected by inflation and newer data.

Along the same line the United Nations has just gotten around to posting the annual report of the Register of Conventional Arms.<sup>7</sup> Again only the latest report is available. I would like to see all the reports online. I would also like to see the original reports, as well as the revised reports which reflect late submissions. That would better enable people to do trend analysis, as would having past editions of the ACDA report mentioned above. Furthermore,

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<sup>3</sup> Some of these groups participate in the U.S. Arms Transfer Working Group. See <http://www.cdi.org/atdb/atdblink.html> to link to them.

<sup>4</sup> <http://leav-www.army.mil/fmso/>

<sup>5</sup> <http://www.louisville.edu/library/ekstrom/govpubs/federal/agencies/treasury/atf.html>

<sup>6</sup> See <http://www.acda.gov/reports.htm>

<sup>7</sup> See

[http://www.un.org/plweb-cgi/idoc.pl?2822+unix+\\_free\\_user\\_+www.un.org..80+un+un+web+web++Register%26adj%26of%26adj%26Conventional%26adj%26Arms](http://www.un.org/plweb-cgi/idoc.pl?2822+unix+_free_user_+www.un.org..80+un+un+web+web++Register%26adj%26of%26adj%26Conventional%26adj%26Arms)

there should be a way for people to export relevant figures from such reports directly into their own spreadsheets. For example, people should be able to take the figures in Table II “Arms Transfer Deliveries and Total Trade 19\_\_-19\_\_ By Region, Organization and Country” of the annual WMEAT and plug them directly into their own spreadsheet or relational database. Of course, this presumes some agreed upon standard so that data can be used by all the differing programs. This processing of information into graphic products--tables, graphs, bar stacks, pie charts--et cetera is far more compelling and persuasive, at least to the lay person, than the straight text that we now see.

Another variant of this problem is that organizations do not always maintain the valuable sites they have set up. A case in point is the United Nations Demining Database.<sup>8</sup> This is the only place where you can find a comprehensive listing of demining reports by country. But it is not kept up to date. The most recent entries for Bosnia date back to early last fall. This is not due to lack of interest on the part of the Department of Humanitarian Affairs but due to funding constraints and consequent lack of personnel. In a case like this we should consider organizing people to write, fax, call, and email an agency urging them to devote more funding or personnel to a project to keep it current. Such an effort is now being led by the Federation of American Scientists which is attempting to keep Congress from eliminating funding for the CIA’s Foreign Broadcast Information Service. I should note that is another potential rich source of information for us which is not being searched or browsed in any systematic way.

A third problem is that government agencies which have relevant primary data simply do not have it online. It is not a case that it is classified. They simply have not done it. For example, the Defense Security Assistance Agency does not have its FMS data online. Why not? It produces an annual hardcopy document, “Foreign Military Sales, Foreign Military Construction Sales and Military Assistance Facts,” with data on FMS Agreements, FMS Deliveries, FMCS Agreements, FMCS Deliveries, Commercial Exports, EDA, IMET, and more. It also produces a “Fiscal Year Series” which contains the same data broken down by region and country. This is not online but should be. It is exactly the sort of data one needs to make accurate trend analysis. Late last year I finally managed to put online in my own site the data from DSAA’s Foreign Military Sales database.<sup>9</sup> It covers FY 1950 through FY 1994. But it is already one year out of date. And it took the manager of information systems where I work over a year between the time I received the data set from DSAA to when he got around to decoding it, due to other priorities he had.

I also have the information from the U.S. AID’s [Agency for International Development] Green Book, “U.S. Overseas Loans and Grants and Assistance from International Organizations,” online, but what is up only goes through September 30, 1994.<sup>10</sup> I am at least one year behind.

I also uploaded the past two annual editions of “Conventional Arms Transfers to Developing Nations” by Richard Grimmett of the Congressional Research Service, Library of Congress<sup>11</sup> The most recent edition actually has the same graphics the hard copy does. But scanning this sort of material in is a highly labor intensive task. In all three cases--DSAA, AID, and CRS--we should be pressing to have the releasing agencies be responsible for putting their information on a publicly accessible web site. Note that I said publicly accessible. CRS has a web site but it only accessible by CRS staffers and Congressional offices. In all cases provisions should be made to ensure that data in their reports is separately exportable.

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<sup>8</sup> See <http://www.un.org/Depts/Landmine/index.html>

<sup>9</sup> See [http://www.cdi.org/Arms\\_Trade\\_Database/Arms\\_Trade\\_Patterns\\_and\\_Trends/ATDATA/DSAA/](http://www.cdi.org/Arms_Trade_Database/Arms_Trade_Patterns_and_Trends/ATDATA/DSAA/)

<sup>10</sup> See [http://www.cdi.org/Arms\\_Trade\\_Database/Arms\\_Trade\\_Patterns\\_and\\_Trends/ATDATA/AID/](http://www.cdi.org/Arms_Trade_Database/Arms_Trade_Patterns_and_Trends/ATDATA/AID/)

<sup>11</sup> See [http://www.cdi.org/Arms\\_Trade\\_Database/Arms\\_Trade\\_Patterns\\_and\\_Trends/ATDATA/CRS/](http://www.cdi.org/Arms_Trade_Database/Arms_Trade_Patterns_and_Trends/ATDATA/CRS/)

Last year Congress passed legislation requiring the State Department to resume publishing a work that they discontinued when Ronald Reagan came into office. It was a report required under Section 657 of the U.S. Foreign Assistance Act which showed the aggregate dollar value of all arms, ammunition, and other implements of war exported under license during the previous fiscal year to foreign countries and international organizations. It included both FMS, commercial and other articles and ranged from whole systems to small arms ammo. We should ensure they put that online when it comes out and that the data is exportable directly into user's spreadsheets and databases.

We should also be pushing for much more data to be put online by the intelligence agencies. In my own country there are periodic reports put out by the U.S. Defense Intelligence Agency or the Office of Naval Intelligence which are relevant. I have no doubt that the U.S. Unified Commands, Central Command, European Command, Southern Command, and Pacific Command have much information which has not been made available. We should also be seeking assistance from historians to dig through the volumes of the Foreign Relations of the U.S. (FRUS) historical series published by the State Department. For that matter, a future well-organized network devoted to arms trade issues would be of great value to historians. As it is now many governments refuse to release primary source data to historians who are charged with compiling official governmental histories. In my country the government recently published an official history of United States foreign policy with a disclaimer indicating that its contents are not accurate or reliable. Because of a failure to declassify certain documents a preface to Volume XXII of the FRUS 1961-1963 warned that it does not meet the standards of accuracy required by a 1991 law.<sup>12</sup>

Fourth, email can and should be better organized. Email has tremendous potential to both inform and persuade. The International Campaign to Ban Landmines serves as an excellent model on how it can be harnessed by NGO's to change public opinion and governmental policy.<sup>13</sup>

However, there should be less duplication. Many people who receive email are doing so via commercial providers. They often pay dearly for their cyberspace mailbox. When they receive the same activist alert, or newspaper article from a half dozen different sources they can quickly grow disenchanted. It is not enough to say that is what the delete key is for. If the same item is wending its way through the Internet circuits, from six different sources, it is taking up valuable bandwidth and contributing to the same Internet traffic jams we all deplore. Possibly, more investment in technology will help here. The use of programs which use multiple search engines at once, or the use of search engines with increasingly sensitive filters to help keep out extraneous and irrelevant material will help. Currently we have search engines which, in addition to standard Boolean search parameters, at best, give weighted returns, i.e. 95%, 80% 60%,... relevant. We can expect technology to improve and we should use it when it is available.

Also, groups or individuals who maintain list servers should maintain archives where their message traffic can be stored so individuals can browse or search at a later date. Speaking of archives, we should be making an effort to create specialized ones. How about one devoted to government documents on controversial arm sales; i.e. the investigation into Iranian arms transfers to Bosnia with at least U.S. tacit approval,<sup>14</sup> the Iran-Contra investigations, South Africa's Cameron Commission of Inquiry, the U.K.'s Scott Inquiry, et cetera. Or how about an archive devoted to corruption in the arms trade. The United States, for example, actually has a

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<sup>12</sup> Secrecy & Government Bulletin, Issue No. 64, January 1997 (Washington, DC: Federation of American Scientists), pp. 1-2.

<sup>13</sup> For more on this point see Jessica Matthews, "Power Shift," Foreign Affairs, Vol. 76, No. 1, Jan./Feb. 1997, pp. 50-66.

<sup>14</sup> [http://www.fas.org/irp/congress/1996\\_rpt/bosnia.htm](http://www.fas.org/irp/congress/1996_rpt/bosnia.htm)

Foreign Corrupt Practices Act which is supposed to prohibit that type of activity. While it is largely ineffective, there is probably useful case history material that should be examined and put online.<sup>15</sup>

Fifth, we need to make a far better effort in obtaining permission to distribute and archive copyrighted material. Admittedly, this is not an easy area to keep up with. Technology is evolving so swiftly that legislation regarding fair use practice and copyright is not keeping pace. In my country some major papers do not mind if you retransmit their copyrighted material via email lists but balk if you store it on your own web site. Others do not allow either. Some allow both. As for other countries I cannot begin to say.

The point is that there are many periodicals, journals, and magazines publishing relevant material which we can probably get permission to digitize and upload, if only we ask. I have in mind specialized military trade press publications which usually are far superior to the mainstream press.

### **Model for the Future?**

Given the sort of considerations I have outlined, what might we want and hope to be able to do in the future in terms of researching arms transfers? The following is a speculative example. It may seem impossible but I think we are closer than we think. Much of the following information is already available online. The real problem is putting together the search that brings it all together in one place.

Let us say we want to look at arms imports to Saudi Arabia during the past five years. We would specify that we want to look at all imports from all sources.

Our search mechanism would immediately access all unclassified primary source data: Foreign Military Sales Data from the Defense Security Assistance Agency; validated export licenses from the Commerce Department; all the reports of the U.N. Register of Conventional Arms, and SIPRI Arms Transfer project, to start with. Simultaneously it would be searching all the online and archived information from all the media: print, transcripts of television, radio, and Internet usegroup messages.

As the information comes in the search mechanism assembles the data via some wonderfully organized interface yet to be devised into previously established formats. One might be a graph giving aggregate dollar value for everything. Another might be multiple graphs broken down by weapon system type or by military construction. There might be a category for logistics or another for equipment grouped by military service. There would be a category listing the separate web sites for the various manufacturers of the systems.

Another category would give detailed technical specifications of the systems; perhaps from a place like Jane's Information Group. We would want high quality pictures as well as text, the sort you find on CD-ROMs also issued by Jane's. To the extent a sale involved offsets, direct or indirect, that would be noted, as would information regarding the different means of production, i.e., coproduction, licensing and technology transfer. There would be a table listing all the different countries which have supplied systems to Saudi Arabia. If a sale was made possible through loan guarantees we would want to know that. In that regard the Defense Export Loan Guarantee Program site<sup>16</sup> set up by the Pentagon should be accessed. We would also want to have available information on future market opportunities to that country, i.e., U.S. Commerce Department Diversification and Defense Market Assessments,<sup>17</sup>

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<sup>15</sup> See studies mentioned in the article "Pssst. Here's a Little Something That Seems to Slow Growth," Washington Post, July 17, 1996, p. D1.

<sup>16</sup> At <http://www.acq.osd.mil/icp/defexloan.html>

commercial forecasts by firms such as Frost & Sullivan, Defense Market Survey, Teal Group, et cetera.

As the information on the sales comes in, the search would also bring up sites devoted to the respective service a system is destined for, i.e. Royal Saudi Arabian Air Force, Army, Navy, National Guard.<sup>18</sup> The search would also access the archives of the International Institute of Strategic Studies (IISS) so that people can see how the force structure and equipment inventory--their military capability--has changed over time.

Economic data would also be available so a user could see the impact of a sale on balance of payments or tradeoffs between military and domestic expenditures, sources such as the World Bank, IMF, the UN's Human Development report, Ruth Sivard's World Military and Social Expenditures, and ACDA would be sifted for relevant data.

The search would also want to look at a bigger picture: impact on regional stability or the inception or acceleration of arms races. Data from the media in neighboring countries would be searched for comments on or reaction towards specific sales. Once again, a service such as BBIS would be invaluable. The search also would look for transcripts of remarks by executive or legislative branch personnel. In the United States one would use Thomas<sup>19</sup> to search the Congressional Record for such remarks as well as for relevant committee hearings or actual bills and laws. We would also want access to archives of primary historical data such as the U.S. FRUS so that we could see what policymakers thought and debated in past decades. We would also want access to specialized historical collections, like the ones developed by the Washington, D.C. based National Security Archive.<sup>20</sup>

To the extent that any sale was controversial we would want to access the International Traffic in Arms Regulations (ITAR) available and, when they start being produced, the reports required by the Wassenaar regime.

If a proposed sale is controversial because the intended recipient nations is thought to egregiously abuse the rights of its own citizenry, one would want to look at human rights data. Many NGOs such as Amnesty, and Human Rights Watch put their information online as does the U.S. State Department with its Country Reports on Human Rights.

## **How to Get From Here to There?**

The above, admittedly like a science-fiction scenario, is not that fantastic. As noted, much of the information exists. It just hasn't been digitized, put on line, or accessed. And we have yet to create the interface that brings it all together. What will it take to accomplish that? Here we come to the division of labor Gerd mentioned. I think we are going to have to make some hard choices. Many NGO's simply don't have the resources to collect information. Their

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<sup>17</sup> See, for example, the Middle East Diversification and Defense Market Assessment: A Comprehensive Guide For Entry into Overseas Markets, U.S. Department of Commerce Bureau of Export Administration, Office of Strategic Industries and Economic Security, July 1996, at [http://www.cdi.org/Arms\\_Trade\\_Database/Regional\\_and\\_Country\\_Information/ASIA/MIDEAST/MARKASS2.TXT](http://www.cdi.org/Arms_Trade_Database/Regional_and_Country_Information/ASIA/MIDEAST/MARKASS2.TXT)

<sup>18</sup> Note sites like this already exist. See Periscope's USNI Military Database at <http://www.nadn.navy.mil/MilFacts/>; Milnet at <http://205.185.9.41/milnet/index.html>; and Armed Forces of the World at <http://www.cfcsc.dnd.ca/links/milorg/index.html> to name two at random.

<sup>19</sup> See <http://thomas.loc.gov/>

<sup>20</sup> <http://www.seas.gwu.edu/nsarchive/>

budgets for publications are minimal and their computer resources sparse. My own organization is sort of considered the proverbial 800-pound gorilla in the Washington, DC NGO community, but in comparison to the groups represented here today we are pitiful. My own arms trade site consists of me working many hours of unpaid overtime, and some portion of the regular workday, and a temp who spends his time scanning documents

Many NGOs are advocacy oriented and their creators are not particularly suited or inclined to do original research. This is not to say they are bad or that they can't play a useful role. It is just that many of them are essentially consumers and distributors of information, not producers or catalogers.

I think we must put egos aside and agree that certain groups are going to have to lead the way in organizing a system. In a sense this is similar to the International Campaign to Ban Landmines which has hundreds of member groups but is directed by a steering committee of only six groups. Groups like SIPRI and the International Relations and Security Network are logical candidates. The steering committee is going to need to include people from both the computing and library sciences world. The reason for the former is obvious; the latter because issues of categorization are critical. We will need to very closely follow evolving technological advances and standards to ensure that the system we come up with does not become obsolete. Hence it must be flexible and capable of adaptation.

Furthermore we are going to have to seek closer cooperation with governments. Let us face facts. Governments are the only places where the information we seek--with the exception of small arms/light weapons and black/grey market transfers--can be found. Governments transfer weapons directly or approve their export by private companies. I think a successful case for closer cooperation can be made on the basis of appealing to government's self-interest. While some governments will undoubtedly be resistant, just as they were to the concept of the UN Register of Conventional Arms, others will see an advantage in the transparency that results. Governments are also the only place that will be able to provide the funding such a system requires. While I have not tried to cost any of this out, my intuition tells me it is going to be far beyond the funding limits of the usual foundation suspects. Personnel costs alone will be high.

Where does everyone else fit into this? Basically I see everyone else as tributaries feeding into rivers. At a minimum everyone producing something new should send an ASCII or HTML formatted copy to a designated receiving point. Anyone maintaining a listserver should establish an archive for their message traffic so that it can be accessed, copied, and cataloged. On this aspect the example of Deja News which catalogs use group traffic could prove instructive. People in various countries should be designated to collect and forward news concerning arms trade developments in their own nations or neighboring regions. There are bound to be relevant communications that they know of which are not covered by agencies such as the Foreign Broadcast Information Service. We will need to scour the globe making sure people can link to groups which have information specific to particular areas--say the Omega Foundation in the U.K. which tracks the export of repression and surveillance technologies. Someone is going to have to take charge of making sure material is translated into different languages.

Although I am largely calling for a greater degree of centralization I do not want to be seen as saying small groups have no useful role to play. Quite the opposite. Many small NGOs have displayed keen appreciation for the potential of the Internet and have pushed for greater collaboration.<sup>21</sup> Very often, due to their ability to specialize NGOs are far ahead of governments in tracking specific issues or regional crisis areas.

As the system grows we will need to establish mirror sites for the various parts of the overall collection. We are going to need to pursue arrangement with all sorts of publishers for

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<sup>21</sup> See, for example, the Information Systems Working Group at <http://www.fas.org/pub/gen/iswg/>

permission to upload and distribute their material. We should look to ensure that the classic published work in the field are online in their entirety. And, probably, at some level we are going to have to introduce some sort of tiered level of access so that specialists and those already familiar with the issue--as much as one person can be--don't have their time wasted with information they already know.

In conclusion, let me just say that I think the march of technology is going to make much of what I described here feasible sooner than we believe possible. But if we do not band together, cooperate and coordinate, the information is going to remain mainly known to governments and private sector firms who have no great interest in sharing it. That is not a comforting prospect. As we all know, weapons are not just another commodity. When it comes to them I believe in full disclosure. As such we should be helping to shape the terms and means of that disclosure because no one else has as much to gain or lose.