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United States Security Assistance Programs, their impact on the U.S. Shipbuilding Industry and implications for Ukraine

Спираючись на публікації з відкритих джерел, проаналізована політика США (та її реалізація) з передачі озброєння та військової техніки (ОВТ) іншим країнам як один з інструментів зовнішньої політики, визначена частина ОВТ ВМС у цьому процесі, здійснена оцінка того, як передача ОВТ ВМС підтримує світовий вплив та престиж США як морської держави, а також розглянути інтереси України в отриманні кораблів (суден) від США в рамках Програм підтримки міжнародної безпеки.

Опираясь на публикации в открытых источниках, проанализирована политика США (и её реализация) по передаче вооружения и военной техники (ВВТ) другим странам как один из инструментов внешней политики, определена доля ВВТ ВМС в этом процессе, проведена оценка того, как передача ВВТ ВМС поддерживает мировое влияние и престиж США как морской державы, рассмотрены интересы Украины в получении кораблей и судов от США в рамках Программ поддержки международной безопасности.

1. The U.S. weapons transfer policy

The U.S., as a leading economic and military world power, historically associated as a leader of arms transfers all over the world. Like others states, the U.S. use arms transfers as a tool of foreign policy, distributing weapons for a variety of strategic purposes. According to Professor Frederic Pearson, countries transfer weapons to other countries and non-state actors for the following reasons. *First*, states often believe that by supplying other governments with arms, the receiving states will be more secure, and that in turn will help provide the security of the supplying country. *Second*, arms transfers is the way to maintain prestige of the supplying country. *Third*, countries also distribute arms to other states and non-state actors in order to gain and maintain the regional power, or to counter their adversaries that are already in power in the region. And *fourth*, weapons transfers helps to influence states because such cases effect the political decision-making process in receiving countries.[1] These reasons completely suit American National interests which will be shown below.

International arms transfer is a form of security assistance to other countries authorized by the Arms Export Control Act (AECA) and a fundamental tool of U.S. foreign policy aimed to protect national security interests and to support defense strategies.

Through the foreign policy execution this tool helps to achive enduring national interests as “The security of the United States, its citizens, and U.S. allies and partners”[2] and also “A rules-based international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges.”[3]

Thus, weapons transfer helps to keep an international order in balance by:

Strengthening the U.S. global network of Allies and Partners;

Increasing their interoperability with U.S. forces;

Providing assets for their own defense.

The Clinton administration in 1995 by the Presidential Decision Directive declared that an important policy consideration for arms transfer decisions should be support to U.S. economic interests. The government’s intent should be to maintain defense-related skills and infrastructure and also create lower per-unit costs for U.S. weapons procurement.

Obama’s Administration “Conventional Arms Transfer Policy” in fact restates most of the goals of Clinton’s arms sales directive: advancing U.S. security; considering the impact on the U.S. defense industry; promoting equipment interoperability with allies. But in addition, the new policy express some specific concern about exactly to whom the United States sells weapons.

Obama’s policy requires officials to consider “the risk that significant change in the political or security situation of the recipient country could lead to inappropriate end-use or transfer of defense articles.”[4]

Another important new criterion requires a consideration of “the likelihood that the recipient would use the arms to commit human rights abuses or serious violations of international humanitarian law, retransfer the arms to those who would commit human rights abuses or serious violations of international humanitarian law, or identify the United States

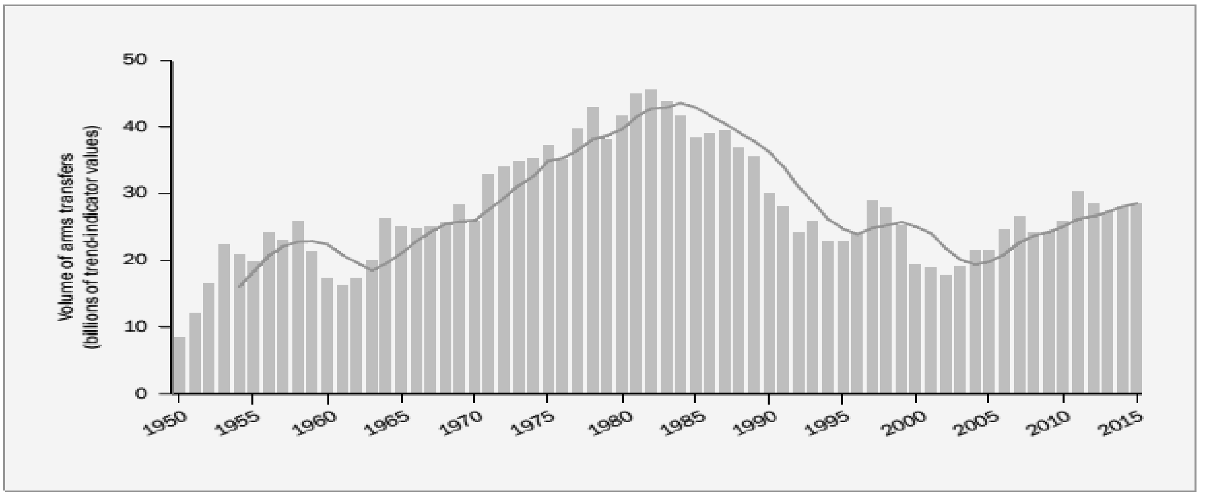

Figure 1. The trend in international transfers of major weapons, 1950–2015

with human rights abuses or serious violations of international humanitarian law."[5]

In general, this new Directive does not change the Clinton's policy. Rather, it just shapes policy to respond to current U.S. national security threats, such as terrorism, transnational organized crime and uncontrolled arms proliferation.

At the same time, some experts argue that new arms transfer policy is not specific enough and can create a problems with its implementation. Military policy analyst Anthony Cordesman, which is a former senior Pentagon official, states that "…the new guidance … is all concepts and no specifics, … the directive covers such a wide range of goals, including boosting human rights and combating transnational organized crime, that it is impossible to know exactly how the criteria might be applied in any specific case."[6]

The policy of the Trump administration, in general, remains true to the course taken by its predecessors. The Kingdom of Saudi Arabia for many years has been in the list of US allies in the Middle East, being in fact an outpost for the implementation of US foreign policy in the region. The result of this was the signing in May 2017 between the governments of these two countries is potentially the largest weapon transfer deal in the history of the USA. In the list of military equipment totaling $ 110 billion, a special place is occupied by the list of ships and boats for the Saudi Arabian Navy Development Program, the total value of which is estimated at approximately $ 16 billion. "According to the LoR the Kingdom outlined four 3,500-ton "frigate-like warships" capable of anti-air warfare, armed with an eight-to-16-cell vertical launch system (VLS) capable of launching Standard SM-2 missiles; fitted with an "Aegis or like" combat system using "SPY-1F or similar" radars; able to operate Sikorsky MH-60R helicopters; with a speed of 35 knots. Six 2,500-ton warships with combat systems compatible with the frigates, able to operate MH-60R helos. 20 to 24 fast patrol vessels about 40 to 45 meters long, powered by twin diesel engines."[7]

Thus, the challenge for the U.S. government and Congress on the global arms trade market is to keep a balance between national security policy requirements and economic interests (national and corporative).

2. Global arms trade trends and U.S. in this market

The volume of the world weapons transfers after the WW2 was defined by the rapid military technologies development, as well as by the global military-political situation

Table 1. The 10 largest exporters of major weapons and their main clients, 2011–15

Note: Percentage of total is rounded to 1 decimal (except for percentages over 10 which are rounded to whole numbers).

	Share of international arms exports (%)		Main clients (share of exporter's total exports %), 2011–15		
Exporter	2011–15	2006–10	1st	2nd	3rd
USA	*33*	*29*	Saudi Arabia (*9.7*)	UAE (*9.1*)	Turkey (*6.6*)
Russia	*25*	*22*	India (*39*)	China (*11*)	Viet Nam (*11*)
China	*5.9*	*3.6*	Pakistan (*35*)	Bangladesh (*20*)	Myanmar (*16*)
France	*5.6*	*7.1*	Morocco (*16*)	China (*13*)	Egypt (*9.5*)
Germany	*4.7*	*11*	USA (*13*)	Israel (*11*)	Greece (*10*)
UK	*4.5*	*4.1*	Saudi Arabia (*46*)	India (*11*)	Indonesia (*8.7*)
Spain	*3.5*	*2.6*	Australia (*29*)	Saudi Arabia (*12*)	Turkey (*8.7*)
Italy	*2.7*	*2.1*	UAE (*10*)	India (*8.8*)	Turkey (*8.2*)
Ukraine	*2.6*	*1.9*	China (*26*)	Russia (*12*)	Ethiopia (*9.2*)
Netherlands	*2.0*	*3.0*	Morocco (*17*)	Jordan (*12*)	USA (*7.7*)

which in general characterized by the competition between communism system states and the Western world. The top of the international arms trade took place in 1978-1982 on the highest point of the Cold War (see figure 1). At the same time a number of the international arms non-proliferation treaties were signed and conventional arms transfers trended to decline up until the USSR and all Soviet system collapse.

After the end of the Cold War, despite declining global demand for weapons, the U.S. strengthen its positions in the arms trade significantly. Some experts explain American defense manufacturers' intention and ability to keep dominance on this market by following reasons: "… (1) a sophisticated technological base (thanks to high U.S. defense procurement and government investment in R&D); (2) governmental promotion of and financial support for arms exports; and (3) industry willingness to provide extra incentives to make a sale. Consequently, the U.S. arms industry has neither cut production significantly nor converted to civilian products despite lower U.S. arms purchases."[8]

However, since 2000, the rising China economic and military power and a renewal competition in arms trade with Putin's Russia has caused a weapons market revival.

The volume of international transfers of major weapons in 2011–15 was 14 % higher than in 2006–2110 (see figure 1).[9] According to the Stockholm International Peace Research Institute research, five biggest exporters in 2011–2015 were the United States, Russia, China, France and Germany, which shared 74 % of all arms exports (see Table 1). The biggest importers were India, Saudi Arabia, China, the United Arab Emirates (UAE) and Australia.[10]

There were some changes in the market share between 2006-2010 and 2010-2015: while the USA and Russia remained by far the largest exporters, China's arms exports increased from a level well below France, Germany and the United Kingdom to third position, just above France. China still only has 5.9 % of global arms exports, however, its share is growing faster than any other state. For the first time, China's weapons exports exceeded those of France, long one of Europe's top arms sellers.

With a 33 percent share of total arms exports, the USA was the top arms exporter in 2011–15. Its exports of major weapons increased by 27 per cent compared with 2006–10. The USA delivered major weapons to at least 96 states in 2011–15, a significantly higher number of export destinations than any other supplier. The largest recipients were Saudi Arabia, accounting for 9.7 % of US arms exports, and the UAE with 9.1 %. At the regional level, the Middle East was the largest recipient of US weapons, accounting for 41 per cent of arms exports. Asia and Oceania received 40 % and Europe 9.9 %.[11]

As of the end of 2015, the USA had numerous outstanding large arms export contracts, including contracts to supply a total of 611 of its new generation F-35 combat aircraft to 9 states.

In order to develop and maintain global cooperation with partners and allies the U.S. government applies a set of Security Cooperation elements that include numerous international programs. The article focused on particular Security Assistance Programs which make all above mentioned arms sales possible with different departments involved in this process.

3. Main U.S. Security Assistance Programs

The U.S. conducts a numerous Security Cooperation Programs that includes such groups of activities as: Combined Exercises, Security Assistance, International Armaments Cooperation, Military-to-Military Contact Programs, Humanitarian Assistance Programs, International training and Education, Combined Operation Support. Arms transfers mostly conducted under Security Assistance. This group of programs includes wide range of options. This article covers Navy's share in three main U.S. programs which provides weapons sales to the foreign governments: Foreign Military Sales, Direct Commercial Sales and Excess Defense Articles.

According to the Security Assistance Management Manual "***Foreign Military Sales*** (FMS) Program is that part of Security Assistance authorized by the Arms Control Export Act (AECA) and conducted using formal contracts or agreements between the United States Government (USG) and an authorized foreign purchaser. These contracts … provide for the sale of defense articles and/or defense services (to include training) usually from Department of Defense (DoD) stocks or through purchase under DoD-managed contracts."[12] This program is conducted by the State and Defense Departments: the State Department's Bureau of Political-Military Affairs sets policy and the Defense Department's Defense Security Cooperation Agency (DSCA) implements the program. Under the FMS program buyer can receive not only assets, but also related software, spares, repairmen, engineering and logistics support, publications and personnel training, other words all that would support the weapons system across its lifecycle. Countries can pay for the U.S. assets/services from their national budgets, however, funds can also be provided through the U.S. government assistance programs or grants.

Foreign Assistance Act (FAA) defines ***Excess Defense Articles*** (EDA) as: "…the quantity of defense articles … owned by the United States Government … which is in excess of the Approved Force Acquisition Objective and Approved Force Retention Stock of all Department of Defense Components at the time such articles are dropped from inventory by the supplying agency for delivery to countries or international organizations under this Act."[13] In other words, defense articles declared as excess by DoD can be offered to foreign governments or international organizations in order to support U. S. national security and foreign policy objectives.

The EDA transfer process works as follows: the DoD Military Departments identify excess equipment; Combatant Commands identify possible recipients; DSCA, which is responsible for the program administration, provides coordination and approval of requests. Partner nations can receive EDA at a reduced price which is based on the condition of assets. Sometimes equipment can be provided as a grant. They are also responsible for the expenses related to EDA packing, handling, transportation and refurbishment if it is necessary. In the most cases nations use EDA transfers to support modernization of their forces.

Table 2

Differences between FMS and DCS programs

Criterions	Foreign Military Sales	Direct Commercial Sales
Nature of Relationship	The US DOD will negotiate with the Customer on behalf of the Vendor.	Customer negotiates directly with the Vendor.
United States Government Involvement	The US DOD assumes contracting risk and is responsible for ensuring that the Vendor meets cost, schedule, and performance requirements. The US DOD guarantees payment by the Customer.	U.S. Government (USG) is not involved in the transaction, and does not act on behalf of the Customer or Vendor should complications arise.
Export Licenses	This is a government-to-government transfer, so the export process is managed the US DOD. No involvement by the Vendor is required.	The Vendor must obtain export approval from the U.S. State Department. The Vendor is responsible for submitting a completed DSP-83.
Congress notification	Any required notifications to Congress are jointly sponsored by the US DOD and the State Department.	Congress must be notified by the State Department of a decision to issue an export license if the sale includes significant defense equipment valued at $14 million or more. (Basically, both DCS and FMS require the same type of notification).
Contract Issues	US DOD procures the defense articles under the same contractual provisions used for all DOD procurement. The Customer pays an additional 3.5% of the total price to cover the contracting and administrative services provided by US DOD.	The Vendor negotiates with the Customer. The Customer assumes management responsibility. These activities represent overhead management costs to the Customer. The size and skill of the Customer contracting staff may be a limiting factor during procurement.
Cash Flow Requirements	The initial deposit required is usually somewhat lower than commercial contract down payments. This facilitates payment by the Customer.	Direct commercial contracts generally require a relatively large down payment, payable at the time of contract signature. This may create difficulties for the Customer.
Availability of Foreign Military Financing Program (FMF) Funding	U.S. financial assistance, through the Foreign Military Financing Program (FMF) may be available to the Customer. If FMF funds are available, they must be processed through FMS (except for the ten countries granted an exception).	If the Customer wishes to use FMF funding, DCS is not an option. Ten countries are granted an exception that allows them to use FMF funding to pay for DCS contracts: Israel, Egypt, Jordan, Morocco, Tunisia, Turkey, Portugal, Pakistan, Yemen, and Greece.

Direct Commercial Sales (DCS) program is administrated by the Department of State. Directorate of Defense Trade Controls is responsible for the DCS implementation by the regulation and providing licenses to private companies for selling weapons, other military equipment, defense services and military training to foreign countries. The main differences between FMS and DCS programs are presented in the table 2.

Congress require the USG to prepare an annual reports to summarize military assistance, military imports and military exports. These reports combined under the “Section 655” report. Both the Department of Defense and the State Department are responsible for submitting their portions: DSCA reports on FMS, EDA and IMET; State Department reports on DCS export licenses. Analyzing these reports can allow an evaluation of the Navy’s foreign weapons sales.

4. The U.S. naval weapons sales across FMS, DCS and EDA programs

The Governmental reports data base contains too large volume of information to make a complete analysis in the frames of this paper. On this reason to analyze DCS and FMS programs two separate reports for two years were randomly taken for each of this programs.

For the ***DCS program*** in related reports all licenses issued by the USG for U.S. companies are divided by countries-recipients and by the category of the transferred equipment. The particular assets or services that were licensed for transfer cannot be sort out from these reports, however, the volume of the naval equipment can be evaluated by considering the licenses under the VI Category (Vessels of War and Special Naval Equipment) from the Categories and Subcategories of the U.S. Munitions List. The result of the 2007 report[14] evaluation is represented in the Table 3.

Main direct buyers from U.S. companies in 2007 were: Canada, UK, Japan, South Korea, Germany and Australia. The U.S. naval assets were bought mostly by UK, Japan, Mexico and Australia. Despite these countries have spent hundreds of millions dollars to buy naval equipment, its portion in the total DCS volume of these countries spending not exceeds a few percent. Some countries, like Azerbaijan, Finland and New Zealand made up to 60% direct naval contracts from the total volume, however, that only means that these countries had no purchases for their aerospace and ground forces in 2007. The total portion of licenses issued for naval sales from the total DCS volume in 2007 was 1.65%.

The similar picture with insignificant changes for the particular countries can be observed for the DCS in 2011[15].

Table 3

DCS of naval articles in 2007

Counrty-recipient	Value of arrticles received	Value of articles received under VI category	Percentage	Counrty-recipient	Value of arrticles received	Value of articles received under VI category	Percentage
Australia	$2 550 800 000	$37 600 000	1,47%	Italy	$2 561 000 000	$13 107 000	0,51%
Azerbaijan	$2 500 000	$1 500 000	60,00%	Japan	$12 425 000 000	$114 800 000	0,92%
Brazil	$188 000 000	$871 000	0,46%	Malasia	$191 000 000	$309 000	0,16%
Canada	$6 300 000 000	$10 467 700	0,17%	Kuwait	$233 000 000	$21 000 000	9,01%
Chile	$112 000 000	$221 500	0,20%	Mexico	$2 056 000 000	$79 563 000	3,87%
Denmark	$526 700 000	$12 069 000	2,29%	Neitherlands	$967 700 000	$21 810 000	2,25%
Finland	$123 900 000	$45 470 000	36,70%	New Zeland	$65 700 000	$5 000 000	7,61%
France	$1 018 700 000	$18 945 000	1,86%	Portugal	$105 000 000	$1 075 000	1,02%
Germany	$3 030 000 000	$26 066 000	0,86%	Saudi Aravia	$258 000 000	$3 815 000	1,48%
Greece	$279 500 000	$11 594 000	4,15%	Singapore	$1 024 000 000	$10 322 000	1,01%
Indonesia	$167 000 000	$3 098 000	1,86%	South Korea	$4 694 000 000	$41 700 000	0,89%
India	$116 500 000	$365 600	0,31%	Spain	$1 103 900 000	$69 700 000	6,31%
Iraq	$1 684 000 000	$4 381 000	0,26%	Sri lanka	$21 000 000	$1 600 000	7,62%
Israel	$2 842 000 000	$34 500 000	1,21%	Sweeden	$1 099 000 000	$8 900 000	0,81%
Total for 2007					**$55 791 700 000**	**$919 349 800**	**1,65%**

Table 4

DCS of naval articles in 2011

Counrty-recipient	Value of arrticles received	Value of articles received under VI category	Percentage	Counrty-recipient	Value of arrticles received	Value of articles received under VI category	Percentage
Australia	$1 546 786 014	$29 690 626	1,92%	Italy	$1 350 179 138	$2 736 825	0,20%
Belize	$1 798 510	$1 127 910	62,71%	Japan	$6 387 158 475	$142 144 685	2,23%
Brazil	$219 921 831	$931 462	0,42%	Mexico	$372 409 792	$11 118 706	2,99%
Canada	$1 451 175 307	$5 355 021	0,37%	Norway	$213 182 295	$15 131 306	7,10%
Chile	$86 684 542	$220 164	0,25%	Pakistan	$217 560 781	$625 979	0,29%
Colombia	$134 161 064	$922 600	0,69%	Panama	$19 137 620	$712 674	3,72%
Denmark	$66 458 022	$660 960	0,99%	Qatar	$1 792 415 581	$187 282	0,01%
Dominican Republic	$2 046 703	$1 070 130	52,29%	Russia	$221 289 990	$975 680	0,44%
Ecuador	$24 568 385	$9 795	0,04%	Singapore	$853 788 349	$1 664 365	0,19%
El Salvador	$6 225 151	$1 128 910	18,13%	South Korea	$2 900 293 076	$11 340 587	0,39%
France	$365 888 002	$2 840 362	0,78%	Spain	$327 380 767	$24 266 310	7,41%
Germany	$2 151 840 203	$638 277	0,03%	Taiwan	$170 954 899	$934 459	0,55%
Guatemala	$5 990 741	$1 127 910	18,83%	Thailand	$353 870 762	$138 550	0,04%
Hong Kong	$112 848 587	$148 511	0,13%	Turkey	$748 645 343	$788 623	0,11%
India	$217 350 531	$12 361 314	5,69%	United Arab Emirates	$2 465 144 471	$4 000 600	0,16%
Iraq	$1 849 698 045	$137 703	0,01%	United Kingdom	$2 040 982 983	$72 237 888	3,54%
Israel	$1 462 319 370	$45 789 137	3,13%	**Total for 2011**	**$30 140 155 330**	**$393 165 311**	**1,30%**

Table 5

Naval arms in FMS 2006-2011 under section 1231

Fiscal year	Total FMS program value, million $	Naval arms value, million $	Ships, vessels, boats and crafts value, million $	Ships, vessels, boats and crafts portion in FMS
2006	3 912	1 285	30.8	0.78%
2007	5 114	1 882	42	0.82%
2008	10 178	3 107	319.9	3.14%
2009	8 041	2 504	267.803	3.33%
2010	9 452	811	248.57	2.62%
2011	14 227	1 029	242.787	1.7%
Total	**50 924**		**1 151.86**	**2.26%**

The biggest naval equipment recipients (see Table 4) were Japan with 2.23% from the total volume, UK with 3.54% from the total volume and Israel with 3.13%. The total portion of licenses issued for naval sales from the total DCS volume in 2011 was 1.3%.

In general, while evaluating the DCS program in 2007 and 2011, it is easy to notice that there were no contracts for ships or auxiliary vessels sold abroad (except a small number of light patrol craft), almost all transfers were related to the naval weapons systems, sphere parts, components, associated equipment and technical data.

To evaluate naval portion in the ***FMS program*** an analysis of the available database for the Section 1231 reports[16] was conducted. This section of John Warner National Defense Authorization Act requires the Secretary of Defense to submit an annual report to Congress on FMS and DCS to foreign entities of significant military equipment (in excess of $2,000,000) manufactured in the U.S. during the preceding calendar year. Such information from these reports as the nature of the equipment and its value, helps to understand how FMS impacts the U.S. shipbuilding industry.

According to the reports (see Table 5) in 2006 a few patrol ships and crafts were bought by Japan and Egypt; in 2007 small boats and craft on total value around $42.0 million were transferred to Kuwait, Colombia, Honduras, Bahamas, Jamaica, Nicaragua and Bahrein; in 2008 three fast missile craft were sold to Egypt and one harbor tag – to Kuwait.

In 2009-2011 period USG transferred to the same countries (including Iraq) more than 120 patrol boats and other craft, however, it was a small portion of the transferred naval arms, which mostly included naval weapon systems and naval aviation equipment from such giants like Lockheed Martin Corporation, Raytheon Company, McDonnell Douglas Corporation and others. It was even a smaller part of the total volume of the FMS program (up to 2.26% in average), which mostly consists of aerospace production.

In order to evaluate ***EDA arms transfers*** the database from the official DSCA website[17] was analyzed and naval part of the delivered assets was separated (see table 6).

Table 6

Ships, vessels and crafts transferred by USG to allies and partners as EDA in period 2000-2012

	Fiscal Year of Request	Country	Item Description	Quant	Delivery Acquisition Value, thousand	Delivery Current Value, thousand
1	2000	Turkey	OLIVER HAZARD PERRY CLASS FRIGATE-USS JOHN A MOORE	1	$135 283	$27 056,6
2	2000	Poland	HAZARD PERRY CLASS FRIGATE (USS CLARK)	1	$101 905	$40 762,2
3	2000	Mexico	NEWPORT CLASS TANK LANDING SHIP (EX-NEWPORT)	1	$53 051	$5 305,1
4	2000	Mexico	KNOX CLASS FRIGATE (EX-WHIPPLE)	1	$38 827	$3 882,7
5	2000	Thailand	KNOX CLASS FRIGATE (USS TRUETT)	1	$27 438	$2 743,8
6	2000	Greece	KNOX CLASS FRIGATE (USS CONNOLE)	1	$24 597	$2 459,7
7	2000	Dominican Republic	BALSAM CLASS BUOY TENDER (BUTTONWOOD)	1	$15 000	$3 000
8	2000	Ecuador	MEDIUM AUXILIARY REPAIR DRYDOCK (USS ALAMOGORDO)	1	$7 486	$374
9	2000	Ghana	BALSAM CLASS BUOY TENDER (SWEETBRIAR)	1	$1 900	$380
10	2000	Ghana	BALSAM CLASS BUOY TENDER (WOODRUSH)	1	$1 900	$380
11	2000	Tunisia	44' MOTOR LIFE BOAT	8	$960	$384
12	2000	Chile	44' MOTOR LIFE BOAT	6	$720	$288
13	2000	Argentina	POINT CARREW PATROL BOAT	1	$575	$230
14	2000	Colombia	PATROL BOAT (POINT WARDE)	1	$575	$230
15	2000	Colombia	PATROL BOAT (POINT WELLS)	1	$575	$230
16	2000	Dominican Republic	82' PATROL BOAT (POINT SPENCER)	1	$575	$230
17	2000	Georgia	POINT COUNTESS PATROL BOAT	1	$575	$230
18	2000	Philippines	82' PATROL BOAT (POINT DORAN)	1	$575	$230
19	2000	Panama	82' PATROL BOAT (POINT HANNON)	1	$575	$230
20	2000	Panama	82' PATROL BOAT (POINT WINSLOW)	1	$575	$230

21	2000	Trinidad-Tobago	82' PATROL BOAT (POINT BONITA)	1	$575	$230
22	2000	Turkmenistan	POINT JACKSON PATROL BOAT	1	$575	$230
23	2000	Seychelles	44' MOTOR LIFE BOAT	4	$480	$192
24	2000	Honduras	44' MOTOR LIFE BOAT	2	$240	$96
25	2000	Seychelles	44' MOTOR LIFE BOAT	1	$120	$6
26	2000	Tunisia	44' MOTOR LIFE BOAT	1	$120	$24
27	2001	Turkey	OLIVER HAZARD PERRY CLASS FRIGATE (USS FLATELY)	1	$107 331	$21 446,2
28	2001	Greece	KNOX CLASS FRIGATE (USS TRIPPE)	1	$24 647	$2 464,7
29	2001	Brazil	GARCIA CLASS FRIGATE (USS BRADLEY)	1	$21 566	$1 078,3
30	2001	Brazil	GARCIA CLASS FRIGATE (USS DAVIDSON)	1	$20 811	$1 040,5
31	2001	Brazil	GARCIA CLASS FRIGATE (USS SAMPLE)	1	$20 098	$1 004,9
32	2001	Brazil	GARCIA CLASS FRIGATE (USS ALBERT DAVID)	1	$19 711	$985,5
33	2001	Brazil	THOMASTON CLASS DOCKING SHIP (USS ALAMO)	1	$19 405	$970,2
34	2001	Brazil	THOMASTON CLASS DOCKING SHIP (USS HERMITAGE)	1	$18 833	$941,6
35	2001	El Salvador	BALSAM CLASS BOUY TENDER (MADRONA)	1	$15 000	$6 000
36	2001	Nigeria	BALSAM CLASS BOUY TENDER (COWSLIP)	1	$15 000	$3 000
37	2001	Panama	BALSAM CLASS BOUY TENDER (SWEETGUM)	1	$15 000	$6 000
38	2001	Turkey	OCEANOGRAPHIC SURVEY SHIP (KANE)	1	$6 151	$1 230,2
39	2001	Nigeria	BALSAM CLASS BUOY TENDER (FIREBUSH)	1	$1 900	$380
40	2001	Nigeria	BALSAM CLASS BUOY TENDER (SASSAFRASS)	1	$1 900	$380
41	2001	Nigeria	BALSAM CLASS BUOY TENDER (SEDGE)	1	$1 900	$380
42	2001	Madagascar	44' MOTOR LIFE BOAT	6	$720	$288
43	2001	Colombia	36' MINI-ARMORED TROOP CARRIERS	7	$700	$70
44	2001	Colombia	82' PATROL BOAT (POINT ESTERO)	1	$575	$230
45	2001	Colombia	82' PATROL BOAT (POINT SAL)	1	$575	$230
46	2001	Costa Rica	82' PATROL BOAT (POINT CHICO)	1	$575	$230
47	2001	Costa Rica	POINT CLASS PATROL BOAT (EX PT BRIDGE)	1	$575	$230
48	2001	El Salvador	82' PATROL BOAT (POINT STUART)	1	$575	$230
49	2001	Georgia	POINT CLASS PATROL BOAT (EX PT BAKER)	1	$575	$230
50	2001	Trinidad-Tobago	82' PATROL BOAT (POINT HIGHLAND)	1	$575	$230
51	2001	El Salvador	44' MOTOR LIFE BOAT	4	$480	$192
52	2001	Guyana	44' MOTOR LIFE BOAT	4	$480	$192
53	2001	Colombia	36' MINI-ARMORED TROOP CARRIERS	1	$213	$21,3
54	2002	Poland	EX-USS WADSWORTH	1	$136 536	$27 307,2
55	2002	Turkey	SAMUEL E. MORISON (FFG-13) GUIDED MISSILE FRIGATE	1	$105 000	$21 161,2
56	2002	Turkey	USS ESTOCIN (FFG-15), GUIDED MISSILE FRIGATE	1	$94 930	$21 021
57	2002	Korea(Seoul)	P-3B (L) AIRCRAFT WITH T56-A-10W ENGINES	5	$41 666,6	$4 358
58	2002	Philippines	USCG CYCLONE CLASS VESSEL (PC-1)	1	$30 000	$3 000
59	2002	Turkey	EX-USS KNOX CLASS FRIGATE CAPODANNO	1	$27 231	$3 061,5
60	2002	Turkey	EX-USS KNOX CLASS FRIGATE THOMAS C HART	1	$26 772	$3 036,1
61	2002	Turkey	EX-USS KNOX CLASS FRIGATE DONALD B. BEARY	1	$26 534	$3 026,7
62	2002	Turkey	EX-USS KNOX CLASS FRIGATE MCCANDLESS	1	$26 388	$3 019,4
63	2002	Turkey	EX-USS KNOX CLASS FRIGATE REASONER	1	$25 590	$2 979,5
64	2002	Turkey	EX-USS KNOX CLASS FRIGATE BOWEN	1	$25 007	$2 950,3
65	2002	Azerbaijan	82' PT CLASS PATROL BOAT (EX PT BROWER WPB 82372)	1	$575	$115
66	2002	Dominican Republic	BOUY TENDER, WHITE SUMAC WLM 540	1	$535	$53,5
67	2003	Taiwan	EX-USS KIDD CLASS DESTROYER (USS KIDD)	1	$394 753	$19 737,6
68	2003	Taiwan	EX-USS KIDD CLASS DESTROYER (USS CHANDLER)	1	$299 808	$14 990,4
69	2003	Taiwan	EX-USS KIDD CLASS DESTROYER (USS CALLAHAN)	1	$273 967	$13 698,3
70	2003	Taiwan	EX-USS KIDD CLASS DESTROYER (USS SCOTT)	1	$273 116	$13 655,8
71	2003	Mexico	EX-USS FREDERICK (LST-1184)	1	$19 616	$1 961,6
72	2003	Yemen	44' MOTOR LIFE BOAT	7	$840	$336
73	2003	Yemen	44' MOTOR LIFE BOAT	1	$120	$24
74	2004	Panama	HARBOR UTILITY CRAFT (S-P)	1	$750	$68,3
75	2004	Djibouti	44' MOTOR LIFE BOAT	4	$474,8	$0,2
76	2004	Colombia	LANDING CRAFT MECHANIZED-8	1	$457,6	$137,2
77	2004	Turkey	SURFACE SPARE AND REPAIR PARTS FOR EDA SHIPS	1	$398,8	$199,4
78	2004	Djibouti	44' MOTOR LIFE BOAT	1	$158	$48
79	2007	Turkey	POWHATAN (ATF 166) FLEET OCEAN TUG	1	$11 203	$1 120,3
80	2007	Greece	LARGE HARBOR TUGS - YTB-832/834	2	$2 736	$273,6
81	2012	Bangladesh	CGC JARVIS HIGH ENDURANCE CUTTER	1	$68 114,8	$6 811,4
Total				**128**	**$2 644 926**	**$307 461,7**

According to this database the total current value of the equipment requests from countries in period 2000 to 2012 amounted $4.8 billion (7252 cases). The requests for the naval assets counted more than $937 million (355 cases), which is 4.8% from the total size. From these requests 145 cases were delivered by the U.S. Implementing Agency (U.S. Navy) to the recipients, however, only 81 cases were related to the direct production of the U.S. shipbuilding industry (ships, vessels, bouts, cruft). It was relatively significant amount of ships (128 hulls of different classes and purposes) by the total current price more than $307 million. All mentioned transfers, however, did not impact directly shipbuilding industry, they did not created additional labor force and did not bring in a revenue for the U.S. companies and for the U.S. budget as well. These kind of military sales can positively impact an industry (not only shipbuilding) only by indirect way, through the associated delivery of training, services, sphere parts, documentation, naval and air armament systems, munitions, etc.

5. Implications for Ukraine

Looking in to the FMS/DCS/EDA database one can note that there are no any naval (ships or vessels) transfers for Ukraine since 1991. The first and last deal for Ukraine can be found in the EDA Public Report 2017. [18]

The U.S. Coast Guard authorized to Supply EDA by transfer to Ukraine two Island class patrol boats: Cushing Island, WPB-1321, and Drummond Island,WPB-1323, (Figure 2) with withdrawn armament and sensors. These bouts were commissioned in 1988 at Bollinger Shipyard in Lockport, Louisiana, and by characteristics they meet enough the Ukrainian Navy's operational needs in the Black Sea region conditions.

However, for this particular case the cost of patrol boats transfer for Ukraine associated with transportation, repair, reequipment and other expenses are comparable with the cost of producing similar boats in Ukraine. In 2017 the group of the Ukrainian DoD specialists inspected the expediency of this case and produced some recommendations for the Ukrainian Government in this issue.

6. Conclusion

Thus, after analyzing above mentioned programs which make possible the U.S. arms transfers all over the world, one can draw a few points of understanding.

U.S. decommissioned-ships transfers do not effect, on a significant scale, the U.S. shipbuilding industry; however, it still remains a powerful tool to develop a wide maritime cooperation, operational, and technical interoperability with allies and partners all over the globe.

Despite the U.S. remains a number one in the world military sales, the portion of naval armaments transfers is a very small part (up to 2-3%) and accordingly the impact of these sales on the U.S. shipbuilding industry is insignificant. In general, the U.S. industry represented at the world naval arms market is mainly by corporate giants, such as Lockheed Martin Corporation, Raytheon Company, McDonnell Douglas Corporation and others, which produce naval weapon systems and naval electronic equipment, as well as aerospace arms, related to the Navy. For instance, Lockheed CEO Marillyn Hewson stated that 20% of company's sales in 2014 were to foreign countries. She also mentioned that Lockheed has a goal to increase international sales up to 25% next few years.[19]

U.S. shipbuilders represented at the market by such companies like Brunswick Commercial & Governmental Products, The Columbia Group, Swiftships Shipbuilders, United States Marine Inc., VT Halter Marino, Thoma-Sea Ship Builders and others. These companies mostly supply U.S. allies and partners with smallest class of ships: fast missile craft and patrol boats, in quantities that does not impact the market and industry proper.

The reasons why the U.S. shipbuilding industry does not sell modern warships and auxiliary vessels abroad can be

General characteristics	
Displacement:	168 tons
Length:	110 ft (34 m)
Beam:	21 ft (6.4 m)
Draft:	6.5 ft (2.0 m)
Propulsion:	2 Paxman Valenta or Caterpillar diesels
Speed:	29.5 knots
Range:	3,300 miles
Endurance:	5 days
Boats & landing craft carried:	1 - Cutter Boat Medium (Yamaha 90 HP outboard engine)
Complement:	16 (2 officers, 14 enlisted)
Sensors and processing systems:	AN/SPS-73 radar
Armament:	Mk 38 25 mm chain gun 2 × M2 .50-cal MG

Figure 2.
USCG Island class patrol boat (WPB)

for two reasons. *First*, it is a licensing. The U.S. Congress issues licenses for certain countries and for certain production only. *Second*, is a U.S.-built ships ability to compete. Relatively high labor force costs causes to the significant costs growth of the final production. Not many countries can accept this price level and some potential recipients prefer another sources to purchase ships (vessels).

As a maritime power the U.S. needs to make more efforts to establish, to keep and to expand its naval cooperation with allies and partners all over the world. A good tool for this could be increasing naval (particular shipbuilding) arms sales with the help of above mentioned programs. This could allow to the USG to strengthen political and economic ties with countries involved in this process, increase presents and influence in the particular regions of the U.S. national interests and also to promote the U.S. naval shipbuilding production across the globe.

To do this, some experts recommend USG to change its policy in arms transfer area in the following directions:

1. to convince Congress in expedience to expand licensing policy for some allies and partners in the naval arms transfers sphere;
2. to propose for this allies and partners, at least for the first contracts, some favorable conditions for ships purchasing in order to compensate higher costs (free training and service, half-price for parts and components, etc.);
3. to do its best in order to help U.S. companies to win contracts for allies and partners Navy's transformation and modernization programs.

Considering Ukraine as a potential recipient of U.S. naval assets we should understand that Ukraine, as a country with a rich shipbuilding potential and ambitions, is able to renew its navy using own shipbuilding enterprises and workforce in case of strong political will to do it. In order to accelerate the Ukrainian Navy renewal and at the initial stage of this process usage of the U.S. Security Assistance Programs is acceptable. In that case for the well-reasoned decision making author should recommend researching in details the Economical expediency of every case of used ships (vessels) transfer not only in terms of expenses required for commissioning of these ships (vessels), but also all the life cycle costs should be taken in to the consideration.

ENDNOTES

1. Frederic S. Pearson. *The Global Spread of Arms: Political Economy of International Security.* Boulder, CO: Westview Press, 1994: p. 53-54.
2. "Fact Sheet: The 2015 National Security Strategy." The White House. 2015. Accessed April 18, 2017. URL: https://www.whitehouse.gov/the-press-office/2015/02/06/fact-sheet-2015-national-security-strategy.
3. Ibid.
4. "Presidential Policy Directive – United States Conventional Arms Transfer Policy." The White House. January 15, 2014. Accessed April 08, 2017. URL: https://www.whitehouse.gov/the-press-office/2014/01/15/presidential-policy-directive-united-states-conventional-arms-transfer-p.
5. Ibid.
6. Singer, Paul. "Obama Issues New Policy for Selling Arms Abroad." USA Today. January 16, 2014. Accessed April 08, 2017. URL: http://www.usatoday.com/story/nation/2014/01/16/obama-foreign-arms-transfers/4520339/.
7. Awad, Mustafa. " Behind the Scenes: The Saudi-U.S. Arms Deal." Newsweek Middle East. May 24, 2017. Accessed June 22, 2017. URL: http://newsweekme.com/behind-scenes-saudi-u-s-arms-deal/.
8. Gabelnick, Tamar and Anna Rich. "Globalized Weaponry." *Social Justice* 27, no. 4 (Winter, 2000): 37-44. URL: http://search.proquest.com.nduezproxy.idm.oclc.org/docview/ 231926100?accountid=12686.
9. Fleurant, Aude. "Trends in International Arms Transfers, 2015." SIPRI Publications. February 2016. Accessed May 03, 2017. URL: http://books.sipri.org/product_info?c_product_id=508.
10. Ibid.
11. Ibid.
12. "Chapter 4 | Defense Security Cooperation Agency." Defense Security Cooperation Agency Security Assistance Management Manual. Accessed April 18, 2017. URL: http://www.samm.dsca.mil/chapter/chapter-4.
13. U.S. Congress. *Legislation on Foreign Relations through 2002*. Cong. Washington: U.S. Govt. Print. Off., 2003: p. 351.
14. "Report by the Department of State Pursuant to Sec. 655 of the Foreign Assistance Act: Direct Commercial Sales Authorizations for Fiscal Year 2007." Stockholm International Peace Research Institute. Accessed April 18, 2017. URL: http://www.sipri.org/research/armaments/transfers/transparency/national_reports/united_states/US655FY2007.pdf.
15. "Report by the Department of State Pursuant to Sec. 655 of the Foreign Assistance Act: Direct Commercial Sales Authorizations for Fiscal Year 2011." Stockholm International Peace Research Institute. Accessed April 18, 2017. URL: http://www.sipri.org/research/armaments/transfers/transparency/national_reports/united_states/US_655_FY_2011.pdf
16. "The United States of America National Reports." Stockholm International Peace Research Institute. Accessed April 19, 2017. URL: http://www.sipri.org/research/armaments/transfers/transparency/national_reports/united_states.
17. "Excess Defense Articles (EDA)." Defense Security Cooperation Agency. Accessed April 19, 2017. URL: http://www.dsca.mil/programs/excess-defense-articles-eda.
18. Ibid.
19. "Are Obama's Record Arms Sales to Saudi Arabia, Yemen, Egypt and Iraq Fueling Unrest in Middle East?" Democracy Now! April 7, 2015. Accessed April 22, 2017. URL: http://www.democracynow.org/2015/4/7/are_obamas_record_arms_ sales_to.

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