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July, 2015

Major Research Paper

**Second-Tier, but Not Second Fiddle:  
Canada's Place in the International Arms Industry**

*Abstract*

*Canada is a country that holds a small but significant place in the international arms industry. Thanks to its close relationship with the United States (US), Canada is a second-tier state that enjoys an exceptional status. This paper aims to provide a descriptive analysis of Canada's place in the international arms industry over the last 6 decades. Key developments in the international arms market, as well as in the Canadian arms industry and buyer list, are examined in the Cold War period (1950-1991), and the post-Cold War period (1992-2013). These developments characterize three factors that make Canada exceptional in the global arms market: the integration of the Canadian arms industry with its US counterpart; close economic cooperation between Canada and the US; and the influence held by the US over Canadian market production and relationships. These factors illustrate the significance and exceptionality of the Canadian arms industry and its participation in the global arms trade. This alone validates the need for an examination and analysis of Canada in the international arms market.*

## Table of Contents

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<b>INTRODUCTION</b> .....	3
<b>PART I: Literature Review</b> .....	5
<b>PART II: Methodology</b> .....	11
<b>PART III: 1950-1991</b> .....	13
The Global Arms Industry, 1950-1991 .....	13
The Canadian Arms Industry, 1950-1991 .....	15
Canadian Arms Production, 1950-1991 .....	17
Implications .....	19
<b>PART IV: 1992-2013</b> .....	25
The Global Arms Industry, 1992-2013 .....	25
The Canadian Arms Industry, 1992-2013 .....	27
Canadian Arms Production, 1992-2013 .....	32
Implications .....	34
<b>CONCLUSION</b> .....	44
<b>BIBLIOGRAPHY</b> .....	46
<b>ANNEX 1: International Arms Exports</b> .....	48
Table 1. Total Arms Exports, in TIV: 1950-1991 .....	48
Table 2. Total Arms Exports, in TIV: 1992-2013.....	54
Table 3. Top 25 Arms Exporters, in TIV: 1950-1991.....	57
Table 4. Top 25 Arms Exporters, in TIV: 1992-2013.....	59
<b>ANNEX 2: Canadian Arms Exports</b> .....	60
Table 1. Canadian Arms Exports by Recipient, in TIV: 1950-1991 .....	60
Table 2. Canadian Arms Exports by Recipient, in TIV: 1992-2013.....	62
Table 3. Canadian Arms Exports by Weapon Category, in TIV: 1950-1991 .....	63
Table 3. CONTINUED: Canadian Arms Exports by Weapon Category, in TIV: 1950-1991..	63
Table 4. Canadian Arms Exports by Weapon Category, in TIV: 1992-2013 .....	63
<b>ANNEX 3: Trade Registers</b> .....	64
Table 1. Trade Register of Major Conventional Weapons, 1950-1991: Canada as Supplier ...	64
Table 2. Trade Register of Major Conventional Weapons, 1992-2013: Canada as Supplier ...	66

## INTRODUCTION

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The international arms industry has experienced a drastic evolution over the past 60 years. The Cold War, the fall of the Soviet Union, and the declaration of War on Terror have all played a significant role in the size, scope, and membership of the global arms trade between 1950 and 2013. And while the market has changed, its participants have experienced significant reforms and developments as well. The ranks of most of the key actors have remained steady; however, other players have entered into or increased their participation in the market, and play a significant role in the global arms trade.

Canada is a country that holds a small but significant place in the international arms industry. Its close economic, political, and geographical relationship with the United States (US) has placed Canada in a unique position. There are three main factors that make Canada exceptional in the global arms market. First, the substantial integration of the Canadian arms industry with its US counterpart has allowed Canada to access the vast research and development resources of the US, boosting Canada's capabilities in producing state-of-the-art weapon systems and specialized technology and expertise. Second, the close economic cooperation between the US and Canada allows Canada not only to export the majority of its arms products to the US, but also piggyback on US-sponsored access to other markets. Finally, the close alliance between the two countries has created an economic, political, and strategic connection across borders, such that the US (as the dominant partner) can influence the Canadian arms industry—from using its buying power to shape production patterns, to affecting Canada's choice in trading partners.

These factors illustrate the significance and exceptionality of the Canadian arms industry and its participation in the global arms trade. This alone validates the need for an examination and analysis of Canada in the international arms market. This paper aims to provide a descriptive

overview of Canada's place in the international arms industry since the beginning of the Cold War, and analyze key events and developments that characterize the above factors.

The first part of this paper will outline the relevant literature collected, provide a broad overview of the main existing approaches to and analyses of the international and Canadian arms trade, and discuss the value and limitations of this information. Secondly, the methodology followed in the production of this paper will be outlined, and will include the sources, justification, and timeframe of the research and analysis. The third part will focus on the status, influences, and changes in the international arms market, as well as in the Canadian arms industry and recipients, between 1950 and 1992, and outline the implications of these findings. The fourth part will examine the same themes and present their implications, but will focus on the period of 1992-2013, and will provide a comparison between the two time periods. The last part of the paper will include concluding remarks, as well as suggestions for further research on this topic.

## PART I: Literature Review

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This paper relies on secondary sources to describe and analyze the features and developments of the Canadian arms industry and Canada's position in the international arms production and export market. A number of scholars offer analyses of the main players, and provide ranks and categorizations of market participants in the global arms trade.<sup>1</sup> Other scholars have presented comprehensive overviews of the arms industries of other states, providing an excellent framework from which to begin outlining Canada's arms industry and place in the international arms trade.<sup>2</sup> The following sections will outline these two main approaches to arms trade analysis.

### *A Global Perspective*

With a significant, but small, arms industry, Canada is not considered a main player in the international arms market. However, its position can be illustrated through the categorical division of arms market participants by certain scholars. First, Brzoska and Pearson (1994) examine "the evolving relative importance" of the "three types of actors in arms transfers: hegemonic, economic, and restrictive" from the middle of the Cold War to the early 1990s.<sup>3</sup> Hegemonic actors have receded since the end of the Cold War, though the US, as the key arms industry participant, still exerts "pressure to limit certain recipients".<sup>4</sup>

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<sup>1</sup> Michael Brzoska and Frederic S. Pearson, "Developments in the Global Supply of Arms: Opportunity and Motivation," *Annals of the American Academy of Political and Social Science* 535 (September 1994): 58-72; and Richard A. Bitzinger, "Towards a Brave New Arms Industry?" *Adelphi Papers* 43, no.356 (May 2003): 1-102. See also Richard Bitzinger, "The Globalization of the Arms Industry: The Next Proliferation Challenge," *International Security* 19, no. 2 (1994): 170-198; E. Regehr, "Canada and the arms trade treaty," *Behind the Headlines* 64, no. 6 (2007), 1-28; and William E. Odom and Robert Dujarric, *America's Inadvertent Empire* (New Haven, CT: Yale University Press, 2004).

<sup>2</sup> Antonio Fonfría and Néstor Duch-Brown, "Explaining Export Performance in the Spanish Defense Industry," *Defence and Peace Economics* 23, no. 1 (2014): 51-67.

<sup>3</sup> Brzoska and Pearson, "Developments in the Global Supply of Arms," 69.

<sup>4</sup> *Ibid.*

Brzoska and Pearson note that “trends appear to indicate that economic and restrictive concerns have come to greater prominence in the post-Cold War period”.<sup>5</sup> Economic actors act as their label suggests—they market arms in the same “neutral” way that they would market any other goods.<sup>6</sup> Restrictive concerns relate to the “widespread support among suppliers for transparency in the arms transfer system”, and consequently, the restriction of certain technologies and equipment and honouring of embargoes placed on specific countries.<sup>7</sup>

Brzoska and Pearson do not explicitly place Canada in one of these categories. Based on Canada’s exceptional status as close ally of the US—the hegemonic actor—it may ultimately be an outlier in this categorization. If approached from a political standpoint, it can be argued that Canada falls under the wing of the hegemon (being the US), and thus works to further the hegemon’s goals. However, if Canada is examined separately, it could be considered an economic actor, particularly in recent years. Recent moves to expand its buyer list have led some to believe Canada is acting in a purely economic sense when it comes to the maintenance and expansion of its arms industry.<sup>8</sup>

It can be argued that this economic leaning has been evident since the Cold War period. A significant amount of literature on the international arms industry supports the idea that there is “a stable, negative relationship between differences in polity and the likelihood of arms trade for the duration of the Cold War, but not in recent years”.<sup>9</sup> That is, countries with similar ideologies were most likely to trade amongst each other, and avoid those states with differing

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<sup>5</sup> Brzoska and Pearson, “Developments in the Global Supply of Arms,” 69.

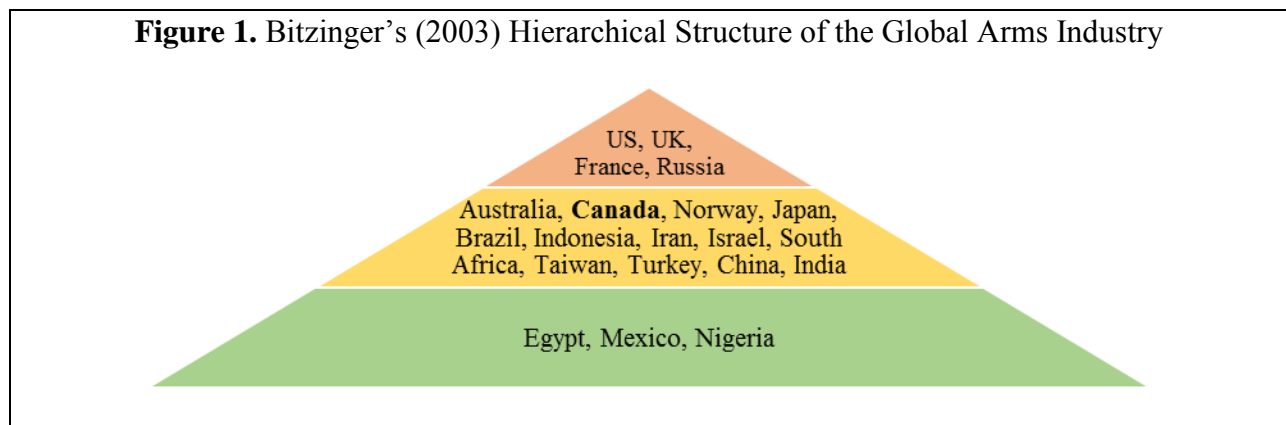
<sup>6</sup> Ibid; see also Regehr, “Canada and the arms trade treaty”.

<sup>7</sup> Ibid.

<sup>8</sup> Lee Berthiaume, “Canada planning to sell guns and military equipment to developing countries to maintain domestic arms industry,” *National Post*, January 5, 2014, accessed March 26, 2014, <http://news.nationalpost.com/2014/01/05/canada-planning-to-sell-guns-and-military-equipment-to-developing-countries-to-maintain-domestic-arms-industry/>.

<sup>9</sup> Anders Akerman and Anna Larsson Seim, “The global arms trade network 1950-2007,” *Journal of Comparative Economics* 42, no. 3 (2014): 537.

ideological perspectives. This framework is understandable—during the Cold War, an East-West divide made it more acceptable for democracies to trade with other democracies, while communist—or Soviet—nations traded amongst themselves. Still, it is interesting to examine Canada’s position during the time, and how it follows—but also deviates from—this truth. Throughout the last six decades, Canada indeed predominantly traded with other democracies; however, exporting weapon systems and technology to autocratic, fragile, and oppressive states was a small but consistent practice of Canada, up to the present day.<sup>10</sup> This may support the inclusion of Canada in Brzoska and Pearson’s “economic actor” category.



Second, Canada’s position in the global arms market is effectively illustrated in Bitzinger’s hierarchical structure of the international arms industry (see Figure 1).<sup>11</sup> According to Bitzinger, there are three “tiers” in which all players in the international arms industry fall. First-tier states “possess the world’s largest and most technologically advanced defence industries” and “dominate...the global defence research and development process”.<sup>12</sup> Bitzinger includes, among others, the US, the UK, and France on this tier. Arguably, Russia—and the former Soviet Union—can be added to this tier as well, based on arms production and exports in

<sup>10</sup> Regehr, “Canada and the arms trade industry.”

<sup>11</sup> Bitzinger, “Towards a Brave New Arms Industry.” See also Bitzinger, “The Globalization of the Arms Industry”; Regehr, “Canada and the arms trade treaty”; and Odom and Dujarric, *America's Inadvertent Empire*.

<sup>12</sup> Bitzinger, “Towards a Brave New Arms Industry,” 6.

the last 60 years; however, in the current and future arms market, while “Russia's defence industries...have survived in some sectors and struggle for international markets, ...they are unlikely to return to their former robustness and comprehensiveness over the next few decades”.<sup>13</sup>

On the opposite side of the spectrum, third-tier states, of which Bitzinger lists as Egypt, Mexico, and Nigeria as examples, are those with “limited and generally low-technology arms-production capabilities”.<sup>14</sup> However, in the middle, the second tier of arms industry players is a more complex group, with three main categories of members. First, Bitzinger includes Canada in this tier as one of several on a list that comprises “industrialized countries possessing small but often quite sophisticated defence industries” like Australia, Norway, and Japan.<sup>15</sup> Second, the second tier contains “developing countries or newly industrialized countries with modest military-industrial complexes”, some of which include Brazil, Indonesia, Iran, Israel, South Africa, Taiwan, and Turkey.<sup>16</sup> Finally, China and India are also a part of this list as “states with large broad-based defence industries, but which still lack the independent research and development and industrial capacities to develop and produce highly sophisticated conventional arms”.<sup>17</sup>

Mainly, Bitzinger and others argue that the arms industries of second-tier countries have stagnated, and must re-evaluate and redesign their systems in order to flourish in the future. While this may be true for many second-tier states, arguably, Canada, which “ranks high among the minor suppliers”, may not be subject to this forecast.<sup>18</sup> Scholars argue, accurately, that the

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<sup>13</sup> Odom and Dujarric, *America's Inadvertent Empire*, 85.

<sup>14</sup> Bitzinger, “Towards a Brave New Arms Industry,” 6.

<sup>15</sup> *Ibid.*, 7.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.*

<sup>18</sup> Regehr “Canada and the arms trade treaty”, 6.

“macroeconomic impact of Canadian defence industries is limited, whether measured as a percentage of gross national product, of trade, or of the total domestic workforce”.<sup>19</sup> That is, the amount of arms it produces and exports is negligible on a global scale. Second, due to its relatively small defence apparatus, Canadian arms industry is heavily dependent on exports.<sup>20</sup> Indeed, “the medium- to long-term prospects of much of the Canadian defence industrial base are strongly influenced—and even determined, at times—by the impact of changes in the international demand and supply for defence equipment”.<sup>21</sup> The unsteadiness of the Canadian arms industry leaves it vulnerable to collapse. These and other aspects cause many to deem Canada as a small and insignificant player in the global arms trade.

Still, while it is considered a second-tier country in the international arms production and export market, again, Canada may not be as easily categorized as such, or may not experience the same events and developments as its closest contenders. Indeed, “Canada’s status as an arms supplier would be more accurately described as modest by Russian and American standards, but high by world standards”.<sup>22</sup> Its exceptionality factors—the integration of its industry with the US, its economic cooperation with the US and US-sponsored markets, and its strategic links to its southern neighbour—may be proof enough that Canada is a unique player in the international arms trade, and may not face the “second-tier stagnation” that Bitzinger predicts.

The existing literature has positioned Canada within specific frameworks of the global arms trade. However, without taking into account the exceptional status of the country’s arms industry, the accuracy of its categorization is flawed. This paper aims to determine Canada’s position in the international arms trade, taking into account its exceptionality factors.

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<sup>19</sup> A.D. Edgar and D.G. Haglund, *The Canadian Defence Industry in the New Global Environment* (Montreal, QC: McGill-Queen’s University Press, 1995). 76.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid., xiv.

<sup>22</sup> Regehr “Canada and the arms trade treaty.”

*Existing Country-Specific Frameworks of Analysis*

While some scholars have provided analyses on Canada's place in the international arms industry, perhaps none have compiled comprehensive data on specifically Canadian arms exports, weapon categories, and position in the international arms trade altogether. However, there have been several authors who have done similar analyses for other countries. For example, in their research, Fonfria and Duch-Brown (2014) examine the Spanish arms industry between 2003 and 2008, and aim to "analyze the main determinants of export performance of Spanish defense contractors and to assess whether the so-called export productivity premium is relevant in this sector, that is, if there is a bias in productivity in favor of exporting firms".<sup>23</sup> In their paper, Fonfria and Duch-Brown empirically analyze "the relationship between domestic market position and export performance at the firm level".<sup>24</sup> While useful to analyze a country's export conduct and culture, this economic framework does not include government-to-government analysis, and the political and ideological factors that ensue. Further, Fonfria and Duch-Brown's research does not examine the larger picture—that is, the country's position in the international market.

While there is some useful research to be found on this topic, a comprehensive analysis of the Canadian arms industry, and its place within the global arms trade, is needed.

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<sup>23</sup> Fonfría and Duch-Brown, "Explaining Export Performance in the Spanish Defense Industry," 52.

<sup>24</sup> *Ibid.*, 60.

## PART II: Methodology

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This paper is a descriptive analysis of the Canadian arms industry over the last six decades. All information on global arms exports, Canadian arms recipients, Canadian arms production, and Canadian arms trade registers was taken from the Stockholm International Peace Research Institute (SIPRI). SIPRI is “an independent international institute dedicated to research into conflict, armaments, arms control and disarmament”.<sup>25</sup> Established in 1966, SIPRI has compiled comprehensive data on the international arms trade spanning from 1950 to today, and is internationally renowned as an accurate, neutral think tank.

In its data collection, SIPRI uses the “trend indicator value” (TIV) as a common unit of measurement. The TIV “is based on the known unit production costs of a core set of weapons and is intended to represent the transfer of military resources rather than the financial value of the transfer”.<sup>26</sup> While the TIV allows for the common and consistent measurement of arms transfers, the data in this paper regarding global arms exports, Canadian arms recipients, and Canadian arms production is portrayed in percentages instead of TIVs. Percentages provide a more comprehensive understanding of the arms industry breakdown, while TIV numbers are less meaningful to assess the position of countries/weapon categories relative to others. Indeed, even SIPRI notes that TIVs are “best used as the raw data for calculating trends in international arms transfers over periods of time, global percentages for suppliers and recipients, and percentages for the volume of transfers to or from particular states”.<sup>27</sup>

The timeframe of this research spans almost 65 years, from 1950 to early 2015, and is divided into 2 periods. The status, influences, and changes in the international arms market, as

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<sup>25</sup> “About SIPRI,” Stockholm International Peace Research Institute, accessed April 2, 2015, <http://www.sipri.org/about>.

<sup>26</sup> “SIPRI Arms Transfers Database – Methodology,” Stockholm International Peace Research Institute, accessed April 2, 2015, [http://www.sipri.org/databases/yy\\_armstransfers/background/background\\_default#TIV-tables](http://www.sipri.org/databases/yy_armstransfers/background/background_default#TIV-tables).

<sup>27</sup> Ibid.

well as in the Canadian arms industry and recipients, will be examined in the Cold War period (1950-1991), and the post-Cold War period (1992-2013). While it is widely recognized that the Cold War actually began in 1946<sup>28</sup>, the research timeframe begins in 1950 due to the availability of data from SIPRI. This breakdown was chosen because the world's largest (during the Cold War) and second largest (post-Cold War) exporters of arms were the Soviet Union and Russia respectively, so it was necessary to divide the data in order to accurately illustrate the state of the global arms market and the significant changes and developments it experienced. Also, the international arms industry, as a result of the end of the Cold War, experienced a major decline, so this time breakdown is also able to accurately capture that change.

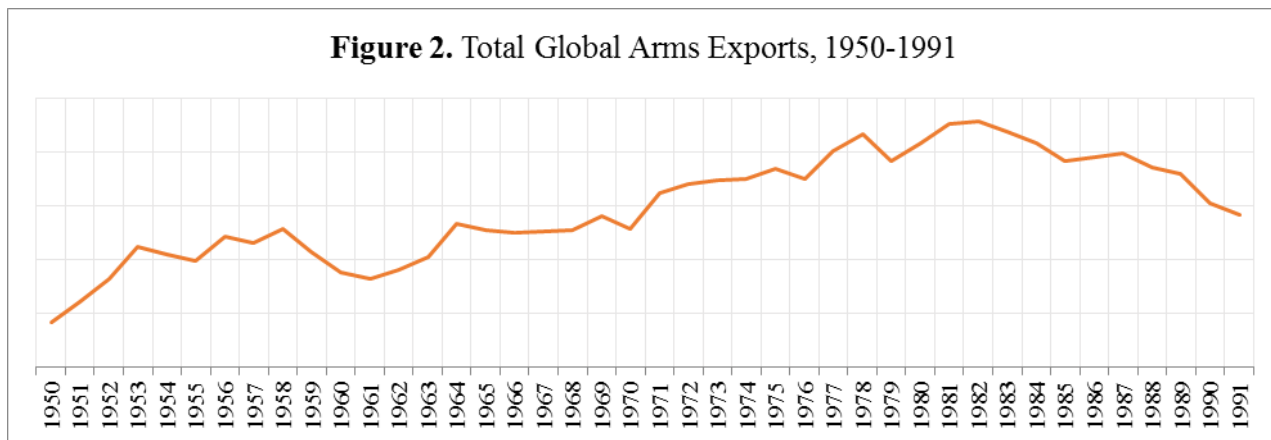
The following two parts of the paper will examine these in two time periods: 1950-1991 and 1992-2013. The parts will also discuss main themes, developments, and changes in Canada's arms industry and its international status, in their respective timeframes.

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<sup>28</sup> "The Cold War, The Canadian Encyclopedia, accessed April 2, 2015, <http://www.thecanadianencyclopedia.ca/en/article/cold-war/>.

## PART III: 1950-1991

### The Global Arms Industry, 1950-1991



Between 1950 and 1991, the global arms trade grew to unprecedented levels, with global arms exports peaking in the 1980s (See Figure 2).<sup>29</sup> In this period, 94 states participated in the international arms trade.

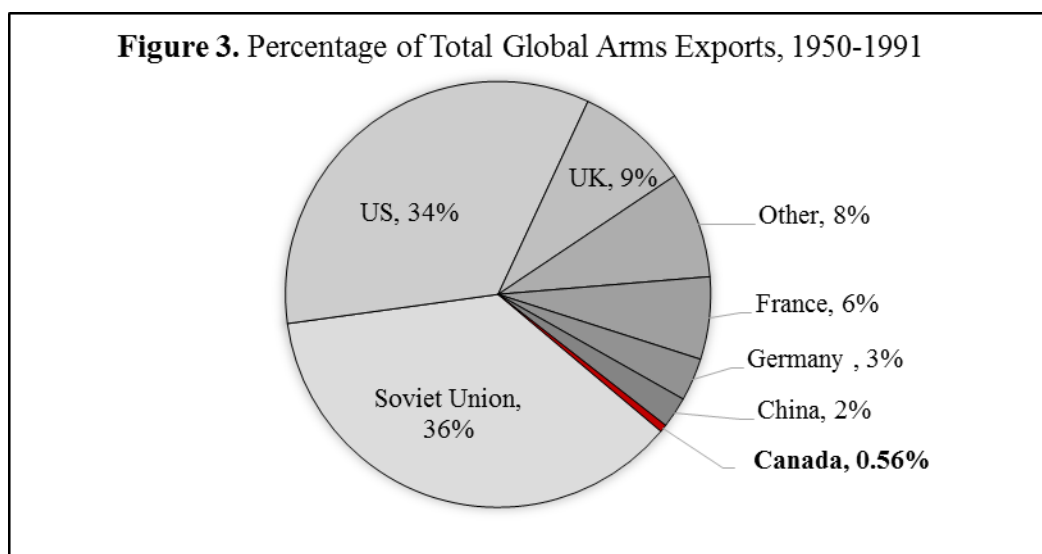
In the period following the Second World War until the fall of the Soviet Union, the arms industry experienced a significant evolution. While European countries were sifting through the rubble of their industrial economies, nations were uniting to form an international body of governance. At the same time, the US and the Soviet Union rose to become the two superpowers in a bipolar system. Out of these developments, a new approach to the production of arms and military technology emerged—mostly out of necessity, due to the decimated industrial bases of Europe and the desire for access to new markets.

This was a globalized, cooperative movement in which the world saw a “significant shift away from traditional, single-country patterns of weapons production toward internationalization of the development, production, and marketing of arms”.<sup>30</sup> During this time of economic

<sup>29</sup> For complete figures regarding total global arms exports between 1950 and 1991, see Annex 1, Table 1.

<sup>30</sup> Bitzinger, “The Globalization of the Arms Industry,” 170.

hardship and increased cooperation among states in other areas, the climate was right for arms industry alliances, in which states with similar interests would enter into agreements to “share the costs and risks of developing and manufacturing new generations of weapon systems”.<sup>31</sup> This method of production also allowed some states to specialize in particular technologies and weapon systems without bankrupting their economies. While very beneficial to the states involved, especially those with smaller military budgets, this collaboration and integration has also resulted in the considerable dependency of second- and third-tier states on their first-tier partners.



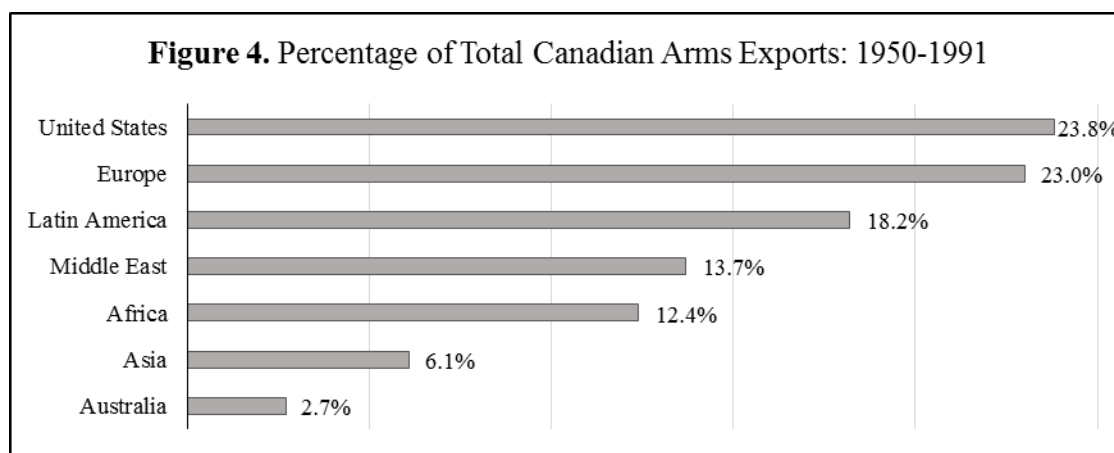
Between 1950 and 1991, Canadian arms exports added up to less than 1% of global arms exports, making Canada the eleventh largest exporter of arms (see Figure 3). The Soviet Union and the US, the two superpowers in the bipolar world of the time, made up more than 70% of all global arms exports, at 36% and 34% respectively. The three other states holding permanent seats on the United Nations Security Council—the UK (9%), France (6%), and China (2%)—as well as Germany (3%), round out the top 6 exporters. Other states made up only 8% of the arms trade.

<sup>31</sup> Bitzinger, “The Globalization of the Arms Industry,” 171.

## The Canadian Arms Industry, 1950-1991

Between 1950 and 1991, Canada's recipient list of arms exports included 76 buyers.<sup>32</sup> Of the other 15 members of the North Atlantic Treaty Organization (NATO), 13 were recipients of Canadian arms.<sup>33</sup> During this time, NATO countries received 53% of all Canadian arms exports, while 37% were exported to other countries.

The largest recipient of arms was the United States, with 23.8% of all Canadian arms exports going to the US (see Figure 4). Europe added up to the second largest customer, receiving 23%. Belgium was the largest European customer, with 5.2%, followed by Greece at 3.3%. The remaining European countries on the list spread the takings relatively evenly—the 6 buyers following Belgium and Greece (France, Norway, Spain, Germany, Denmark, and the Netherlands) received between 1 and 3% of all Canadian exports each, while the remaining 6 countries (Portugal, the UK, Austria, Italy, Ireland, and Finland) altogether received 2%.



Third, Latin America received 18.2% of all Canadian arms exports, with the largest receivers being Brazil at 6.5% and Peru at 4.1%. Like Europe, many small buyers made up the

<sup>32</sup> For complete figures regarding Canadian Arms Exports between 1950 and 1991, see Annex 2, Table 1.

<sup>33</sup> During this time period, there were 16 members of NATO: the founding states from 1949 (Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the US); members added in the first enlargement in 1952 (Greece and Turkey); a member added in the second enlargement in 1955 (Germany); and a member added in the third enlargement in 1982 (Spain). See "A short history of NATO," NATO, accessed April 2, 2015, <http://www.nato.int/history/nato-history.html>.

rest of the percentage. The 3 countries on the list after Brazil and Peru (Mexico, Venezuela, and Chile) received between 1 and 2% of all Canadian arms exports each. The following 7 Latin American countries (Ecuador, Argentina, Bolivia, Colombia, Panama, Guatemala, and Honduras) took less than 3% altogether, while the bottom 5 countries (Jamaica, Haiti, Paraguay, Uruguay, and Cuba) received less than 0.5% altogether.

The Middle East was Canada's fourth largest recipient category for arms, at 13.7%. The largest Middle Eastern customer was Turkey, who received 6.5% of all Canadian arms exports, and the distant second was Egypt at 2.3%. The 2 following countries (the United Arab Emirates and Iraq) took over 1% each, while the remaining 8 Middle Eastern countries on the list (Oman, Saudi Arabia, Morocco, Israel, Kuwait, Cyprus, Yemen, and Syria) received a little over 2% altogether.

In fifth place, Africa, with Kenya and South Africa as its main recipients (receiving 2.5% and 1.9% of all Canadian arms exports, respectively), received 12.4%. The following 3 countries on the list (Zambia, Tanzania, and Cameroon) took between 1 and 1.6% of Canadian arms exports each, while the remaining 12 countries (Sudan, the Democratic Republic of the Congo, Ghana, Mauritania, Togo, Angola, Ethiopia, Morocco, Senegal, Uganda, Nigeria, Botswana, Gabon, and Suriname) added up to less than 4% of all Canadian arms exports.

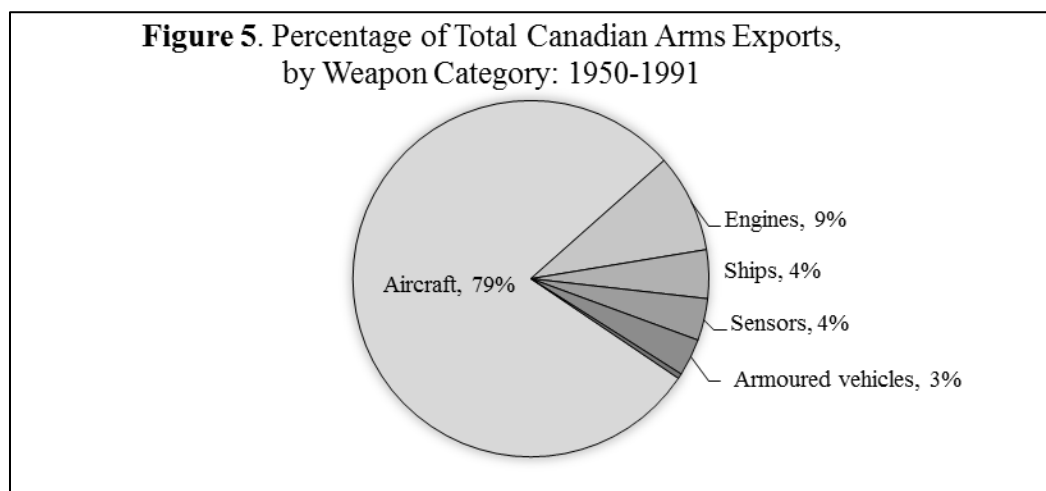
Sixth, Asia's main buyers, Malaysia (2.2%) and India (1.9%) helped the continent take 6.1% of all Canadian arms exports. Similar to Africa, Asia's recipients, minus the top two, were many in number, but received little in quantity. Following Malaysia and India, Thailand purchases made up less than 1% of all Canadian arms exports, while Indonesia and Myanmar both received a quarter of a percent. The remaining 7 Asian countries on the list (Philippines,

Singapore, Pakistan, South Korea, Taiwan, and Sri Lanka) made up three quarters of 1% altogether.

Finally, Australia received the remaining 2.7% of all Canadian arms exports.

Based on this information, it is clear that, between the years of 1950 and 1991, the United States was the most important customer in Canada's arms industry. Europe was almost equal in receiving Canadian arms exports; however, divided, individual European countries did not receive anywhere near the amount of Canadian arms exports as the US.

### Canadian Arms Production, 1950-1991



Between 1950 and 1991, Canada's arms exports overwhelmingly consisted of aircraft<sup>34</sup>—almost 80% of all exports from the Canadian arms industry (see Figure 5). Engines<sup>35</sup> were the distant second largest weapon category at almost 9%; however, Canada's engine exports were

<sup>34</sup> SIPRI defines the "aircraft" weapon category as "all fixed-wing aircraft and helicopters, including unmanned aircraft (UAV/UCAV) with a minimum loaded weight of 20 kg", though "exceptions are microlight aircraft, powered and unpowered gliders and target drones". See Stockholm International Peace Research Institute, "SIPRI Arms Transfers Database – Methodology."

<sup>35</sup> The "engines" weapon category includes "(a) engines for military aircraft, for example, combat-capable aircraft, larger military transport and support aircraft, including large helicopters; (b) engines for combat ships - fast attack craft, corvettes, frigates, destroyers, cruisers, aircraft carriers and submarines; (c) engines for most armoured vehicles - generally engines of more than 200 horsepower output". Ibid.

for the most part an addition to its aircraft supply—that is, most of the engines were designed for aircraft. Ships, sensors<sup>36</sup>, and armoured vehicles<sup>37</sup> made up the last 10%.

During this time, most of countries that received significant percentages of Canadian arms exports received aircraft as the majority of their total purchase.<sup>38</sup> Key European recipient Belgium bought 54 fighter aircraft from Canada in the late 1950s, while Greece bought 104 second-hand fighter aircraft and 31 trainer aircraft in the same decade (see Annex for a detailed trade register). Similarly, for the two main Latin American buyers, Brazil and Peru, both countries' purchases consisted of mostly aircraft. Brazil received 2 anti-submarine warfare (ASW) aircraft from Canada in 1961, followed by 24 transport aircraft in the late 1960s and early 1970s, while Peru received 2 light aircraft and 39 transport aircraft between 1950 and 1987.

In the mid-1950s, the Middle East's top recipient of Canadian arms exports, Turkey, made significant purchases of 105 fighter aircraft and 24 trainer aircraft, followed by 54 trainer aircraft in 1967, and 30 subsonic aircraft in 1985. The second highest recipient, Egypt, received 10 transport aircraft in the early 1980s. Further, Kenya, Africa's key recipient of the time, received solely aircraft from Canada between 1950 and 1991—11 light aircraft and 19 transport aircraft, while South Africa's major purchase of the time was 37 fighter aircraft.

Key Asian buyers Malaysia and India also follow this trend, with Malaysia picking up 20 transport aircraft and 20 trainer aircraft in the 1960s, and India receiving 34 light aircraft, 36 trainer aircraft, and 26 transport aircraft in the same decade. Finally, Australia's purchases

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<sup>36</sup> The “sensors” weapon category includes “(a) all land-, aircraft- and ship-based active (radar) and passive (e.g. electro-optical) surveillance systems with a range of at least 25 kilometres, with the exception of navigation and weather radars, (b) all fire-control radars, with the exception of range-only radars, and (c) anti-submarine warfare and anti-ship sonar systems for ships and helicopters”. See Stockholm International Peace Research Institute, “SIPRI Arms Transfers Database – Methodology.”

<sup>37</sup> The “armoured vehicles” weapon category includes “all vehicles with integral armour protection, including all types of tank, tank destroyer, armoured car, armoured personnel carrier, armoured support vehicle and infantry fighting vehicle”, though “vehicles with very light armour protection (such as trucks with an integral but lightly armoured cabin) are excluded”. Ibid.

<sup>38</sup> For a complete trade register of Canadian arms exports between 1950 and 1991, see Annex 3, Table 1.

between the mid-1950s and mid-1980s primarily consisted of 7 light aircraft and 31 transport aircraft.

While the Canadian aerospace industry appeared to be the most prominent at the time, a large portion of the purchases of Canada's largest and most important customer, the US, countered this trend. Towards the end of the Cold War, US interest in Canadian arms shifted from the sky to the ground: while the US did receive 100 trainer aircraft from Canada in 1955, its main purchases were of armoured personnel carriers (APCs), 748 of which the US bought in the mid-1980s. These purchases made up the whole portion of the percentage of Canadian arms exports for the "armoured vehicles" category. Though aircraft remained Canada's top seller, the massive purchases of APCs by the US in the mid-1980s represented the start of a shift in the Canadian arms industry.

## **Implications**

Between 1950 and 1991, while Canada's export recipient list was quite substantial, it was the pervasiveness of US influence on Canada's arms industry that shaped Canada into a unique and significant player in the international arms industry. With such a close bond with one of the two superpowers of the time, Canada's arms industry was influenced and transformed by American developments, needs, and ambitions.<sup>39</sup> The Cold War period saw the political and economic cooperation and integration between the two countries solidify and their arms industry alliance become exceptional.

Significant bilateral agreements and treaties officially established this alliance. The Ogdensburg Agreement of 1940, and the subsequent creation of the Permanent Joint Board on Defence, made it clear that "Canada was a part of North America, with vital interests linked to

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<sup>39</sup> Alex Macleod et al., "Hobson's Choice - Does Canada Have Any Options in Its Defence and Security Relations with the United States?" *International Journal* 55 (1999-2000): 341-354.

continental defence and cooperation” with the US.<sup>40</sup> While its defence and arms industries remained small, Canada was recognized as an important actor in the “military and industrial preparedness” of North America.<sup>41</sup> A number of accords, including the Defence Production Sharing Arrangement of 1956 and the Defence Development Sharing Arrangement of 1963, further cemented the two countries’ commitment to cooperation through the “joint funding of research and development projects”, as well as the “greater standardization in the design and production of military equipment”.<sup>42</sup> These production arrangements allowed “Canadian firms to compete on an equal footing with their American counterparts in the US market,” while the development arrangements continue to assist “Canadian firms in developing goods for use by the US military.”<sup>43</sup>

As such, Canada’s arms industry became closely linked to that of the US, fostering shared prosperity and security. Indeed, the following decades would see an increase in Canada’s “cooperation with, and integration into” the arms industry and market of its southern neighbour.<sup>44</sup> And, without a doubt, this alliance “has been a real bargain for the Canadian government, allowing it to enjoy a level of security it could never have reached with its own resources”.<sup>45</sup>

### *Economic Cooperation*

Economic cooperation in relation to arms production and exports was a key feature of the alliance at this time. Through bilateral treaties and agreements, Canada and the US basically

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<sup>40</sup> Edgar and Haglund, *The Canadian Defence Industry in the New Global Environment*, 61.

<sup>41</sup> Ibid.

<sup>42</sup> Gale Group, “The business of war: Canada has a sizeable arms industry that is joined at the hip to the huge military production system in the United States,” *Canada and the World Backgrounder* 71, no. 6 (2006): 27.

<sup>43</sup> Kenneth Epps and Kyle Gossen, “On the Record: An audit of Canada’s report on military exports, 2003-05,” *Project Ploughshares*, January 2009, 14, accessed April 2, 2015, <http://ploughshares.ca/wp-content/uploads/2009/01/OntheRecord1.pdf>.

<sup>44</sup> Ibid.

<sup>45</sup> Macleod et al., “Hobson's Choice,” 341.

opened their arms markets to the each other. Such a significant export relationship is partially a result of the US' exemption from "Canadian trade regulations involving military goods"—under Canada's export control laws, "US-bound arms do not require permits [and] are not tracked".<sup>46</sup> The Canadian government argues that this "free trade in military goods" has three main benefits to Canada: first, it "facilitates defence cooperation and collaboration between the US and Canada" second, it encourages "an unhindered flow of goods over the border", thus benefiting both countries' defence industries; and it "generates greater accessibility of Canadian suppliers to the enormous market of US government contracts".<sup>47</sup>

This cooperation also provides Canada with access to US-sponsored markets. As a close partner of the US in arms production and export, Canada can piggyback on the US' economic relationships, and even arms deals. Mainly though, US-Canada arms industry cooperation is beneficial in regards to the US' huge buying power, and Canada's opportunity to feed the beast.

While increased cooperation with first-tier states has allowed the arms industries of second- and third-tier states to thrive, such significant cooperation has caused significant dependence of the smaller actors on their larger partners. And not just economically—some scholars have argued that the "fundamental characteristic of the defence market" is that "its logic is primarily political rather than either economic or even military".<sup>48</sup> Particularly in this time period, as the Cold War chilled the international sphere, arms transfers from the US and the Soviet Union were the "primary foreign policy tool" used to "signify and cement political alignment and bloc membership", gain strategic access, and "control and influence the behaviour of recipients to support the foreign policy objectives of the supplier state".<sup>49</sup>

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<sup>46</sup> Epps and Gossen, "On the Record," 13.

<sup>47</sup> Ibid, 14.

<sup>48</sup> Ibid, 43.

<sup>49</sup> Edward J. Laurance, *The International Arms Trade* (Toronto, ON: Maxwell Macmillan Canada, 1992), 95.

Further, in addition to its buying power, the US was a significant customer to Canada due to its role as supplier of arms to Canada—over 85% of all Canadian arms imports came from the US. This reflects Canada’s nearly total reliance on the US for defence capabilities and military support. For Canada, its very close relationship with the US has cemented the reality that, “directly or indirectly, changes in the international economic and security environment, governmental policy initiatives related to defence economic relations, and corporate responses to both of the above have a powerful and unavoidable impact on the export-oriented Canadian defence industry”.<sup>50</sup>

Canadians were happy to prosper alongside their southern neighbour in this time period. Both economies experienced great forward momentum, and Canada’s position in the international system gained further prominence. However, in terms of the country’s participation in the arms industry, some scholars argue that there remained a “lingering suspicion” among Canadians that “there is something inherently dubious about military expenditures in a country that, in their eyes, has no interests that could effectively and ethically be safeguarded by the use of force”.<sup>51</sup> It would be very interesting to conduct further research on this topic, and examine if Canadian public perception in any way influenced the developments in the arms industry during this time period.

### *Industry Integration*

The integration of the Canadian and American arms industries—or, more accurately, the integration of the Canadian arms industry into its American counterpart—became the norm between 1950 and 1991. Through the political and economic cooperation between the two countries, Canada was able to access the immense wealth of research and development within

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<sup>50</sup> Edgar and Haglund, *The Canadian Defence Industry in the New Global Environment*, 61.

<sup>51</sup> *Ibid*, xiii.

the American arms industry. Through this integration, Canada amassed technological expertise, and became a renowned producer of specialized systems.

As the data illustrates, Canada produced a significant amount of “complete systems like armored vehicles and aircraft” between 1950 and 1991; however, the Canadian arms industry was emerging as “an important part of the network of component and sub-system suppliers”.<sup>52</sup> Following World War II, Canada’s military industrial base saw a “shift away from the domestic production of major platforms towards a concentration on subsystems and components”.<sup>53</sup> This became increasingly evident in the late 1970s and onward, when Canada began to supply aircraft engines in addition to complete aircraft. This concentration allowed Canada to provide specialized engines to countries that had purchased the complete aircraft from another state. For example, between 1983 and 1989, Canada supplied 54 turboprop engines to Egypt (making up around 80% of its total purchases from Canada), specially designed for aircraft that had been produced in Brazil. Aerospace technology, communication and navigation systems, and electronics are all fields in which the Canadian arms industry excels, and for which it has gained international recognition.<sup>54</sup> This expertise has “given Canadian companies competitive advantages in individual niche markets and facilitated their export-sales orientation”.<sup>55</sup>

As a loyal ally to the US, Canada reaped the benefits of its relationship with and proximity to its southern neighbour as the two arms industries shared costs, technologies, and markets. As a result, Canada was in a unique position as an arms producer and exporter: despite a small military industry, Canada was able to focus on specialized weapons systems and carve out a place for itself in the global arms trade as an esteemed producer of specialized technology

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<sup>52</sup> Regehr, “Canada and the arms trade treaty,” 5.

<sup>53</sup> Edgar and Haglund *The Canadian Defence Industry in the New Global Environment*, 62.

<sup>54</sup> Ibid.

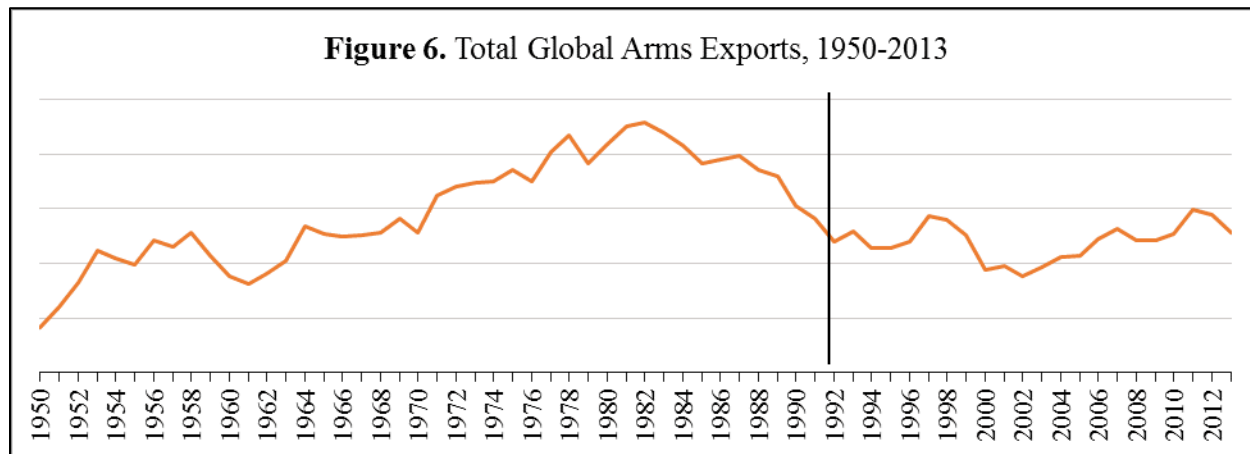
<sup>55</sup> Ibid., 77.

and expertise. Still, while Canada benefited from this arrangement, the clear winner was the US, as such Canadian dependence allowed the US arms industry to influence its Canadian counterpart. Such integration of industry allowed the more dominant US to shape its weaker partner, and have significant power over its actions and developments. US discontent or disagreement had the potential to wreak havoc on the Canadian arms industry. As will be discussed in the next part of the paper, such events almost came to pass in the late 1990s.

While the period between 1950 and 1991 saw great changes in the international arms industry, as well as Canada's role within it, the period following the fall of the Soviet Union proved to be similarly progressive. The following section will examine this time period, and the trends and developments evident in the arms industry on both a global and Canadian level.

## PART IV: 1992-2013

### The Global Arms Industry, 1992-2013



Between 1992 and 2013, the global arms industry took a nosedive, though slightly recovered after the declaration of War on Terror. Total global arms exports fell by almost 60% (see Figure 6).<sup>56</sup> The main culprits of this decrease were the former leaders of the bipolar system, the US and Russia. Without a direct adversary, both states were forced to lower their defence budgets and shrink their military industries substantially, which was felt throughout the globe.

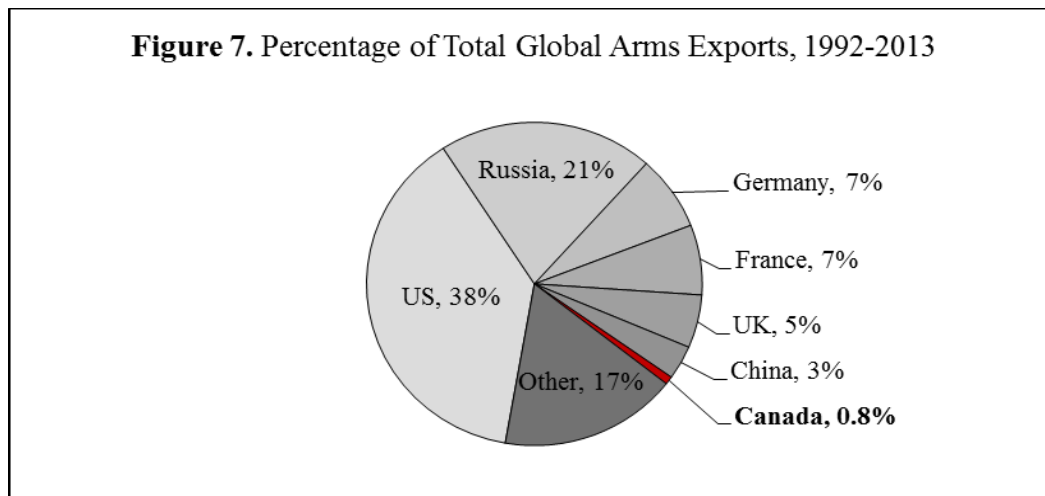
The international arms trade underwent another evolution during this time period. Following the fall of the Soviet Union and the “the weakening of ideological and national identities associated with the Cold War”,<sup>57</sup> the formerly bipolar world had to adjust to a system of unipolarity. This meant economic change, new trading relationships, and the reinvigoration of the UN, which had been stagnated due to the antagonistic veto power in the Security Council. Further, “as the perceived conventional threat diminished with the end of the Cold War, defense budgets were reduced and major weapons programs slowed down in the main arms-producing

<sup>56</sup> For complete figures regarding global arms exports between 1992 and 2013, see Annex 1, Table 2.

<sup>57</sup> William W. Keller and Janne E. Nolan, “The Arms Trade: Business As Usual?” *Foreign Policy* 109 (Winter 1997-1998): 120.

countries”.<sup>58</sup> Without a direct adversary, Russia and the US—and the rest of the world— had no choice but to decrease their defence budgets—a move that was felt throughout the military industrial sphere.<sup>59</sup>

This adjustment was felt strongly in the arms industry. The number of players in the market diminished by almost a third, from 94 to 68. Further, the total quantity of arms exports decreased by more than half. However, to a certain extent, some of this decline can be explained by states’ previous purchases—that is, “the practical need for some purchasing nations to absorb and integrate major weapons systems they have already purchased into their force structures”.<sup>60</sup> It became a buyer’s market, in which states could seek out more specialized or specific armaments for a lesser price.



In this period, Canadian arms exports again added up to less than 1% of global arms exports, though the industry did see a small increase from the Cold War period. Still, Canada fell from eleventh to fourteenth in the list of largest exporters of arms (see Figure 7). The US and

<sup>58</sup> Stephanie Neuman, “Power, Influence, and Hierarchy: Defense Industries in a Unipolar World,” *Defence and Peace Economics* 21, no. 1 (2010): 106.

<sup>59</sup> Edgar and Haglund, *The Canadian Defence Industry in the New Global Environment*; and Neuman, “Power, Influence, and Hierarchy.”

<sup>60</sup> Richard F. Grimmett, *Conventional Arms Transfers to Developing Nations: 1999-2006* (New York, NY: Nova Science Publishers Inc., 2008), 6.

Russia again dominated the market, though less so; together, they made up almost 60% of all arms exports, at 38% and 21% respectively—15% less than in the 1950-1991 period. The other permanent members of the Security Council, as well as Germany, again rounded out the top 6 highest exporters, though Germany (7%), France (7%), and China (3%) all held larger portions of exports than before, and the UK (5%) saw a significant decrease.

Though the international arms trade remained an industry for the elite during this period, a significant difference between the 1950-1991 period and the years following the end of the Cold War was the increased prominence of other players in the arms trade. While the overall number of market actors decreased during this time, some states were able to either enter the market or increase their share of it, making up 17% of all global arms exports. The actions of first-tier states in previous years, which had “allowed some diffusion of technology, through licenses and coproduction among allies or close political associates”, helped to prompt this change, as “these smaller power allies [were] able to design equipment on their own”.<sup>61</sup> This trend was common throughout many second-tier states, including Canada. Still, arms exports in all experienced a severe downturn during this time period.

### **The Canadian Arms Industry, 1992-2013**

Between 1992 and 2013, total Canadian arms exports fell by a whopping 40%.<sup>62</sup> The number of buyers on its recipient list dropped from 76 to 59. Of NATO members, now up to 27 countries plus Canada, 17 were present on the list, and they received almost 60% of all Canadian arms exports—a 6% increase from the previous time period.<sup>63</sup> While the larger number of NATO

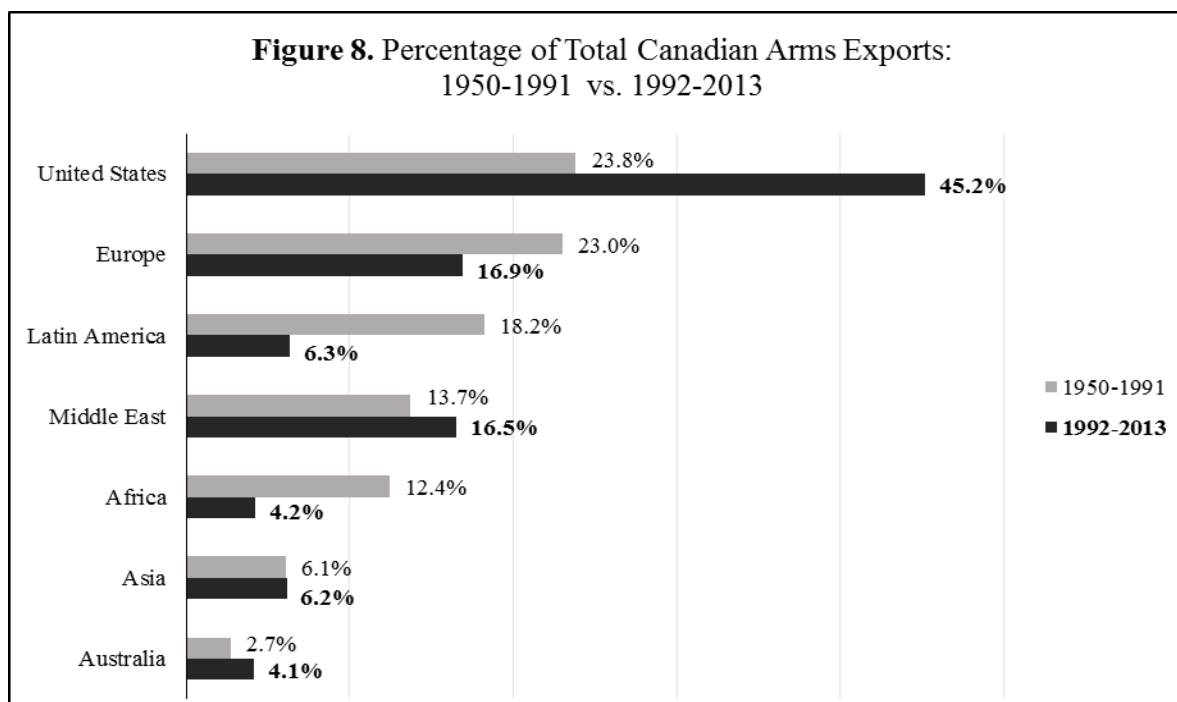
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<sup>61</sup> Brzoska and Pearson, “Developments in the Global Supply of Arms,” 68.

<sup>62</sup> For complete figures regarding Canadian arms exports between 1992 and 2013, see Annex 2, Table 2.

<sup>63</sup> During this time period, to the already 16 members strong NATO, three members were added in the fourth enlargement in 1999 (the Czech Republic, Hungary, and Poland); six members were added in the fifth enlargement in 2004 (Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia); and two more members were added in the sixth enlargement in 2009 (Albania and Croatia). See “A short history of NATO.”

member participants in the arms industry might have had an effect on this increase, the role of the US in relation to Canadian arms exports during this time cannot be underestimated. During this time, the US remained the top recipient of Canadian arms exports (see Figure 8).



While the total amount of US purchases increased only 12% (see Table 1), the margin of its top spot in the recipient list of all Canadian arms exports grew significantly. This period saw the US receive 45.3% of all Canadian arms exports—almost doubling its takings from the Cold War period.

Recipient Category	Change in Quantity of Exports Received	Change in Percentage of All Canadian Arms Exports Received
US	+12%	+47%
Europe	-55%	-26%
Latin America	-79%	-65%
Middle East	-28%	+17%
Africa	-78%	-64%
Asia	-39%	+2%
Oceania	-9%	+33%

Europe remained the second largest recipient of Canadian arms, though it saw the total quantity of Canadian arms exports it received significantly decrease by 55% from 1950-1991. This decline impacted Europe's percentage of total Canadian exports received, decreasing it by more than a third, from 23% to 16.9%. The top European recipients were the UK (at 3.3%) and France (at 1.9%). While the UK saw an increase in both the quantity (up 74%) and percentage (up 84%) of Canadian exports it received, France saw a 60% decrease in the quantity of arms exports it received, even though its percentage of received Canadian arms exports increased by 33%. The following 7 European countries on the list (Sweden, Ireland, Greece, Denmark, the Netherlands, Portugal, and Poland) took between 1 and 2% each, while the remaining 9 countries (Spain, Belgium, Romania, Czech Republic, Finland, Slovenia, Switzerland, Bulgaria, and Croatia) took a little over 2% altogether.

Latin America, previously the third largest recipient of Canadian arms, saw a significant decrease in their takings between 1992 and 2013, falling by two thirds from 18.2% to only 6.3% of all Canadian arms exports. Brazil remained the largest Latin American customer, though its takings fell by over 4% between the periods of 1950-1991 and 1992-2013—from 6.5% to 2.3%. Colombia came in second place, with a little over 1%. The remaining 6 countries on the list (Mexico, Chile, Uruguay, Peru, Ecuador, and the Dominican Republic) altogether took less than 3% of all Canadian arms exports.

In this period, the Middle East gained ground, and its takings made up 16.5% of all a Canadian arms exports, which was 17% more than from 1950-1991—a small but significant increase. The emergent key buyer in this region was Saudi Arabia, whose purchases made up 13.7% of all Canadian arms exports between 1992 and 2013. This was a significant jump from the years of the Cold War, at which time Saudi Arabia's takings made up only a quarter of a

percent of Canadian arms exports. The period of 1992-2013 saw Saudi Arabia's total quantity of Canadian arms exports received skyrocket by 93%. The distant second largest Middle Eastern customer of Canadian arms was the United Arab Emirates, whose purchases made up less than 1%, reflecting a decline of more than two thirds in total quantity of Canadian arms exports received. The remaining 6 countries on the list (Turkey, Israel, Oman, Egypt, Iraq, and Jordan) altogether made up 2%.

Africa, like Latin America, saw a significant decline in the quantity and percentage of Canadian arms exports it received. During this time, Africa's quantity of Canadian arms exports received fell by 78%, while its portion of the percentage of all Canadian arms exports decreased by almost two thirds—from 12.4% in 1950-1991 to 4.2% in 1992-2013. Africa's largest buyer of the period, Botswana, increased its quantity (by 96%) and percentage (by 97%) of the Canadian arms exports it received. These high numbers may be misleading, as Botswana received less than 0.1% of all Canadian arms exports between 1950 and 1991, and its percentage increased to only 2.3% between 1992 and 2013. Africa's other key buyer, South Africa, which remained in second place throughout, saw both its quantity and percentage decrease, by 74% and 57%, respectively.

During this time, Asia experienced a small increase of 2% in its percentage of all Canadian exports, though the total quantity of Canadian arms exports it received decreased by more than two thirds. South Korea and Taiwan both experienced a significant increase of around 90% in the quantity of Canadian arms they were receiving, and both saw an increase of over 90% in their take of the total percentage of Canadian arms exports. However, like the case of Botswana, these high percentages may be misleading—both South Korea and Taiwan were very low on the recipient list between 1950 and 1991, each accounting for less than 1% of total Canadian arms exports each, and their percentages increased to only 1.5% each.

Finally, Oceania accounted for 4.1% of all Canadian arms exports—an increase of 33% from 1950-1991. This is mostly a result of New Zealand entering the arms market, though Australia's portion of the percentage of Canadian arms exports did increase by almost one quarter. Despite this, the total quantity of Canadian arms exports received by the region decreased by 9%.

### *The War on Terror*

In all, between 1992 and 2013, arms exports declined significantly. However, a very substantial event at the beginning of the new millennium prompted many states to rethink their decreasing defence budgets and fewer arms exports and purchases. The events of September 11, 2001 sparked the multinational declaration of War on Terror, an affirmation that reignited the arms industry and resulted in a slight increase in total arms trades over the next ten years.

The theoretical “War on Terror” quickly prompted material action, mainly due to the invasions of Afghanistan by a multinational US-led coalition, and Iraq by the US and a handful of supportive countries. These invasions slightly revived the arms industry, with new weapons, transport vehicles, and technology needed to support troops on the ground. Later in the decade, the demand for supplies remained, particularly by the US, as continued missions, as well as the training of armed forces in the region, required similar products.

For Canada, the War on Terror resulted in a shift in arms production and arms recipients as well. Saudi Arabia was becoming a more prominent customer of Canadian arms in the mid- to late-1990s. Indeed, between 1992 and 2001, Saudi Arabia was actually Canada's biggest customer, receiving 32% of all Canadian arms exports, while Canada's traditional top buyer, the US, received only 17% (see Table 2 in Annex 2 for full details). Before the tragic events of 9/11,

Canada's buyer list was increasingly diverse, and it appeared that the US, while still a significant customer, was no longer the key to the prosperity of the Canadian arms industry.

However, in the years following the fall of the twin towers, Canada's arms industry saw a shift back to its more traditional place of reliance on US purchases. Saudi Arabia's purchases during this time made up only 6 % of all Canadian arms exports, while the US' share jumped significantly to make up 58% (see Table 2 in Annex 2 for full details). Canada's close alliance with the US, and its participation in the invasion of Afghanistan as a part of the "Coalition of the Willing", saw the Canadian arms industry grow slightly, but once again become significantly dependent on its exports to the US.

Despite the effects of the War on Terror, the global arms industry saw a significant decline in arms exports following the Cold War. However, this period allowed for new players to join the market, diversifying countries' buyer lists and allowing for further collaboration and partnership. This new diversity also allowed countries to enhance or even change their specialties, resulting in the production of different arms categories.

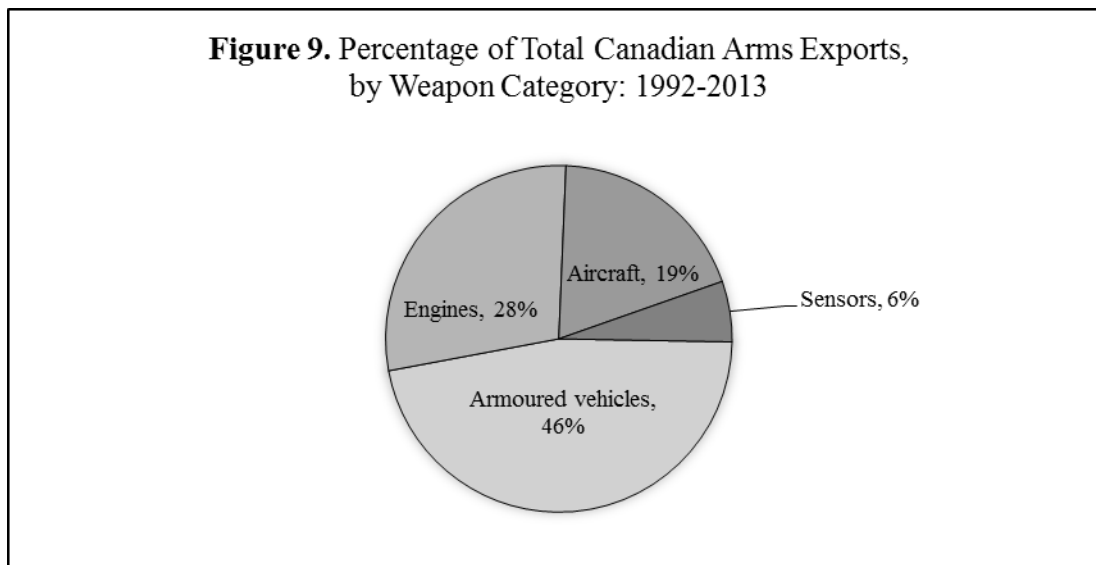
### **Canadian Arms Production, 1992-2013**

Canada saw a significant shift in the composition of its arms production between 1950-1991 and 1992-2013.<sup>64</sup> Aircraft was no longer the dominant category—its portion of the percentage of total Canadian arms exports fell by almost three quarters, from 79% to 19% (see Figure 9). In contrast, the engines category saw significant gains of almost two thirds, jumping from 9% to 28%. The portion of the total percentage of Canadian arms exports belonging to sensors also increased, though only by third, bringing the category from 4% to 6%. But the most significant shift in the composition of Canadian arms exports is that of armoured vehicles—a

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<sup>64</sup> For a complete trade register of Canadian arms exports between 1992 and 2013, see Annex 3, Table 2.

category that accounted for only 3% of all Canadian arms exports between 1950 and 1991, but rose to become Canada's largest weapon category between 1992 and 2013, making up 46% of Canadian arms exports. This huge increase changed the shape of the Canadian arms industry as a whole, and offered a more diverse composition of weapon production.



The US, with its purchase of almost 800 APCs in the mid-1980s, paved the way for the expansion of Canada's armoured vehicle production. Further purchases of 29 APCs in 1994, and Canadian licencing on a whopping 4288 APCs between 2000 and 2011, continued that track. Still, aircraft proved to be a consistent key weapon category—the US received a significant amount of aircraft products, including 172 light helicopters between 1994 and 1999.

Like the US, some parts of the Middle East appear to be the driving force behind Canada's move toward the production of armoured vehicles over aircraft. In the 1990s alone, the region's highest recipient of Canadian arms exports, Saudi Arabia, received 1512 APCs, followed by another 1141 APCs between 2000 and 2011. In contrast, the region's distant second largest buyer, the United Arab Emirates, received only air-related products in this time, taking 12 transport aircraft and 53 aircraft engines between 2008 and 2012.

Oceania also furthered the increase in Canada's production of armoured vehicles. In the 1990s, Australia received 247 armoured vehicles—133 APCs and 114 light armoured vehicles (LAVs). New Zealand also made a significant purchase of armoured vehicles, receiving 105 APCs in 2001.

Europe remained significantly tied to the Canadian aerospace industry during this time. Europe's largest recipient of Canadian arms exports, the UK, received no products from the armoured vehicles weapon category. Instead, the sole UK purchase in this timeframe was 5 transport aircraft in 1997. Similarly, France's pull included only aircraft-related products, including 50 unmanned aerial vehicles (UAVs) and 50 aircraft engines in the 1990s.

Latin America also maintained its air inclination, with biggest buyer Brazil receiving only aerospace-related products in this time, including aircraft technology and 123 aircraft engines in the early- to mid-2000s. Likewise, the second highest receiver of Canadian arms exports, Colombia, received solely aerospace products, with 51 aircraft engines, as well as aircraft radar, purchased in this time.

Like Europe and Latin America, Africa also focused its purchases on aerospace products alone. In the late 1990s, Africa's key buyer of Canadian arms, Botswana, purchased 18 second-hand fighter aircraft, while South Africa received 60 aircraft engines during this time. Similarly, key Asian buyers South Korea and Taiwan received only aerospace products, with South Korea's sole purchase being 105 aircraft engines in 2000, and Taiwan's only take being 27 aircraft radar systems in the early 1990s.

## **Implications**

Between 1992 and 2013, particularly from the onset of the War on Terror, Canada was subject to many of the same experiences in relation to American influence and pervasiveness as

it was during the Cold War. Economically, the US continued to play a significant—and, arguably, larger—role in the production and market of Canada’s arms. The huge US purchases of APCs during this time period is a perfect demonstration of how a first-tier state can influence and affect the arms industry of a second-tier state. The US’ purchasing power shifted the entire Canadian arms industry from an aerospace-heavy business into one that focused primarily on armoured vehicles. This shift benefited Canada, allowing for the further expansion of its customer base, enticing those countries looking for such weapon systems, like Saudi Arabia.

However, this substantial shift of the Canadian arms industry reflects Canada’s dependence on and vulnerability regarding the needs and influences of the US. It is a clear example of the trend in this period, when “second-tier states appear[ed] to be more dependent than even on first-tier producers for critical technologies, components, capital and jobs”.<sup>65</sup> Moreover, Canada’s reliance on US weapon systems remained very high during this time. Indeed, these factors indicate the continued reliance of Canada on its southern neighbour for the continued stability of its arms industry, and thus the ability of the US to influence Canadian production and exports as it sees fit. The Canadian public may dispute this economic collaboration and domination, as “The disappearance of the Soviet threat has led to a loss in credibility of any new “preparedness” appeal made to Western publics, who are now convinced that domestic programs must take priority over foreign (including defence) policy”.<sup>66</sup> But ultimately, some scholars have concluded that “the risk of diverging in any meaningful way from what the [US] expects of Canada is still considered far too great for any Canadian government to

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<sup>65</sup> Bitzinger, “Towards a Brave New Arms Industry,” 81.

<sup>66</sup> Edgar and Haglund, *The Canadian Defence Industry in the New Global Environment*, 8.

contemplate seriously”; as such, “Canada essentially tries to limit American ambitions, whilst preserving the friendly character of their exchanges”.<sup>67</sup>

The integration of the two countries’ arms industries remained a feature of their alliance in this time period as well. While past agreements and treaties remained valid and prompted continued and enhanced partnership, globalization also played a part in the further assimilation of the American and Canadian arms industries during this time. The significant decline in military budgets and thus overall global arms exports after the Cold War led states to approach the development, production, and marketing of arms in a different way. Indeed, “as the arms market...contracted and industry...rationalised operations, the bulk of armaments production [became] more of a global, integrated and hierarchical affair”.<sup>68</sup> This suited second-tier suppliers like Canada quite well, as their specialized industries were already suitable for an assembly line type of production process. This globalized approach to the arms market allowed for less expensive production—as producing a component of a weapon system is much cheaper than producing a whole weapon system—and saw Canada’s exports of arms components like aircraft engines and sensors grow to account for more of Canada’s total arms exports.

Such developments, and their benefits to Canada, did not go unnoticed by the US. While relations remained friendly for the most part, the US has displayed signs of dissatisfaction on the asymmetry of this partnership. For example, in 1999, “the State Department decided to withdraw the Canadian defence and aerospace industry’s special status as a trading partner”, which would revoke Canada’s access privileges to specialized technologies and expertise and limit Canadian companies’ access to American contracts.<sup>69</sup> Ultimately, this decision was revised, and instead, Canada and the US committed to “set up a ‘North American security perimeter’ to harmonize

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<sup>67</sup> Macleod et al., “Hobson’s Choice,” 342.

<sup>68</sup> Bitzinger “Towards a Brave New Arms Industry,” 81.

<sup>69</sup> Macleod et al., “Hobson’s Choice,” 347.

rules of security”.<sup>70</sup> Still, the impact of such a decision would have been dire, considering the reliance of Canada on American research and development, capital, and jobs, and can be viewed as a reminder to Canada that the US’ influence and power over the Canadian arms industry is pervasive and substantial.

### *Economic Considerations*

Through the data, it can be deduced that Canada, while remaining a close ally of the US and conforming to American influence, saw a shift in its approach to arms dealings. Canada began to expand its buyer’s list, and instead of trading with predominantly democratic allies as in the past, appeared to place precedence in economic gains as opposed to political.<sup>71</sup> Indeed, the emergent key buyer of Canadian arms, Saudi Arabia, is an oligarchy that enforces oppressive laws and regulations on its citizens, and its human rights record is dicey at best. Further, Canada continued to trade, though small amounts, to states with weak institutions and therefore less control of received weapons, like Colombia.

Following the Cold War, it appears that “the receding threat from communism brought a rationalization of the defence industries and a threat to prosperity”.<sup>72</sup> The lack of defined adversaries, economic stagnation and the subsequent decrease in global defence budgets meant that the international arms industry needed a new approach. While “ideological differences appear to have mattered for link formation during the Cold War”<sup>73</sup>, it became clear that “the post-Cold War global policy on conventional arms sales [became] competition”.<sup>74</sup> Indeed, in this

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<sup>70</sup> Macleod et al., “Hobson's Choice,” 347.

<sup>71</sup> Akerman and Seim, “The global arms trade network.”

<sup>72</sup> Gavin Maitland, “The Ethics of the International Arms Trade,” *Business Ethics: A European Review* 7, no. 4 (1998): 202.

<sup>73</sup> Akerman and Seim, “The global arms trade network,” 546.

<sup>74</sup> Keller and Nolan, “The Arms Trade,” 113.

time period, “the development, production, and marketing of advanced conventional weapons began to resemble other sectors of the international economy”.<sup>75</sup>

Further, second-tier countries like Canada, using the technology available to them through close alliances with first-tier states, “developed a distinctly more commercial approach to distributing arms than that of the superpowers, out of the necessity of supporting military research and development with far smaller domestic markets and resources”.<sup>76</sup> Thus, military technology was more widely spread through the market, and as such, smaller actors were able to compete with the big players.

Such preference to economic considerations has prompted some scholars to call attention to the ethical issues of trading with countries with poor human rights records, or that might use the weapons for purposes other than upon what was agreed. The Canadian government insists that it “strives to ensure that Canadian military exports are not prejudicial to peace, security or stability in any region of the world or within any country”.<sup>77</sup> A 2010 DFATD report on exports of military goods from Canada outlined the “current export control guidelines mandated by Cabinet”:

Canada closely controls the export of military goods and technology to countries: -that pose a threat to Canada and its allies; that are involved in or under imminent threat of hostilities; that are under United Nations Security Council sanctions; or whose governments have a persistent record of serious violations of the human rights of their citizens, unless it can be demonstrated that there is no reasonable risk that the goods might be used against the civilian population.<sup>78</sup>

While such a standpoint appears to value human rights over economic gains, critics argue that the “unless” clause “create[s] room for interpretation” in which Canada can agree to trade with a

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<sup>75</sup> Keller and Nolan, “The Arms Trade,” 120.

<sup>76</sup> Brzoska and Pearson, “Developments in the Global Supply of Arms,” 68.

<sup>77</sup> “Report on Exports of Military Goods from Canada 2007-2009,” Foreign Affairs, Trade and Development Canada, last modified 2010, accessed April 2, 2015, [http://www.international.gc.ca/controls-controles/report-rapports/military\\_report-2007\\_09-rapport\\_militaire.aspx?lang=eng](http://www.international.gc.ca/controls-controles/report-rapports/military_report-2007_09-rapport_militaire.aspx?lang=eng).

<sup>78</sup> “Report on Exports of Military Goods from Canada 2007-2009.”

country it deems suitable.<sup>79</sup> Some scholars argue that “the Canadian government is paying insufficient attention to existing export control criteria...by ignoring the true risks of human rights violations arising from Canadian equipment shipped for military end-use”.<sup>80</sup> This is a serious issue, as there may be instances in which Canada may not know how or where its exports are ultimately used.

Globalization is a key perpetrator in the lack of accountability issue. While this approach had many benefits, many “component suppliers”<sup>81</sup>, including Canada, face a lack of control over the final home and use of the weapon system to which they had contributed. Of course, the sale of Canadian-produced arms components “is always legitimate and closely monitored”; however, “given the nature of the highly globalized arms industry, precisely where the parts go and what they are used for after the initial point of sale is nearly impossible to track”.<sup>82</sup> Basically, Canada can “control [its] products only to the point at which they are used in manufacturing, not to their ultimate military use”—in most cases, “only the country where the final assembly and systems integration take place has any control over its final destination”.<sup>83</sup>

Some scholars and arms specialists have deemed this new approach dangerous and ill-advised, arguing that not only will the security of states suffer, but that the “globalization of arms production and military technology is a form of proliferation that threatens the...global system of trade and investment”.<sup>84</sup> Even if Canada affirms that it will only participate in arms deals with other democracies, it is impossible to know if a Canadian-made aircraft engine will ultimately

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<sup>79</sup> L. K. Yanik, “Guns and Human Rights: Major Powers, Global Arms Transfers, and Human Rights Violations,” *Human Rights Quarterly* 28, no. 2 (2006): 373.

<sup>80</sup> Epps and Gossen, “On the Record,” 29.

<sup>81</sup> Regehr, “Canada and the arms trade treaty,” 7.

<sup>82</sup> Colin Campbell, “How Canada ignores shady arms sales,” *Maclean's* 120, no. 43 (November 2007): 45.

<sup>83</sup> Regehr, “Canada and the arms trade treaty,” 7.

<sup>84</sup> Keller and Nola, “The Arms Trade,” 113.

end up in a plane owned by an autocratic regime. This may threaten the integrity of the Canadian arms industry, hindering the appeal of Canada as a good base in which market players can invest.

Globalization allowed the global arms industry to be fragmented into smaller, more specialized pieces, shifting the arms market from a focus on whole products to the compilation of weapon systems with pieces from a number of producers. However, it was the growing privatization of the arms industry between 1992 and 2013 that significantly changed the face of weapon development, production, and marketing.

### *Free Enterprise*

While the Canadian government, among others, may be placing higher value on economic considerations, such practice is the whole design of private companies. The role of private companies and key stakeholders in the arms industry increased quite dramatically after 1991. Dwindling government buying power after the Cold War made both economic and normative space for private companies to enter the market. While “government-led initiatives have stagnated”, it appears that “industry-to-industry defence collaboration has expanded rapidly”.<sup>85</sup> Indeed, “defense firms, as opposed to governments, increasingly have been taking the initiative in internationalizing arms production, in ways that could eventually result in a radical restructuring of the global defense industrial base”.<sup>86</sup>

This increasing prominence of private companies in the international arms industry also raises the issue of accountability. With “no global rules governing the import and export of arms”, private companies have free reign of the global market.<sup>87</sup> And unlike governments, private companies are not held as firmly to account in the international system for breaking

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<sup>85</sup> Bitzinger, “The Globalization of the Arms Industry,” 181.

<sup>86</sup> *Ibid.*, 180.

<sup>87</sup> Denise Garcia, “Global Norms on Arms: The Significance of the Arms Trade Treaty for Global Security in World Politics,” *Global Policy* 5, no. 4 (2014): 425.

global norms and are much less sensitive to political penalties for aligning themselves with the “wrong” buyer.

Indeed, the actions of private companies, even those that produce arms, are expected to reflect the market and maintain a steady equilibrium of supply and demand. However, in order to do this, companies must supply arms as they are demanded. And with profit—the entire purpose of this exercise—involved, companies can be expected, for the most part, not to discriminate when it comes to countries that demand arms. Scholars have pointed out that “it is not difficult to find examples of Canadian weapons transfers that point to a control system that is marred by significant holes, not compliant with accepted standards, or prone to commercial pressures”.<sup>88</sup> And further, “the lack of uniform standards also creates incentives for companies in states with more restrictive policies to license production or set up subsidiaries in more permissive states in order to expand the market for their products”.<sup>89</sup> It became clear in the late 1990s that both international and domestic guidelines were needed to regulate this market in a more transparent and consistent way.

### *International Developments*

Beginning in the early 2000s, the international system began to unite on the issue of trade restrictions to countries with oppressive governments, turning this norm into an international treaty. Indeed, the 1992-2013 period was “characterized by a self-proclaimed shift towards more ethical arms trade policies on the part of Western leaders”; however, “proponents of international regulation have questioned the ability of states to act responsibly”.<sup>90</sup> And despite the gains

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<sup>88</sup> Epps and Gossen, “On the Record,” 3.

<sup>89</sup> Regehr, “Canada and the arms trade treaty,” 8.

<sup>90</sup> Akerman and Seim, “The global arms trade network,” 535.

during this time, “arming the world [remains] a big and largely unregulated business, a reality that any despot worthy of the name knows and exploits”.<sup>91</sup>

A major development in the global arms industry took place in the fall of 2006, when the United Nations General Assembly “took a first small but formal step” towards global arms regulation by agreeing to “explore the creation of ‘common international standards for the import, export, and transfer of conventional arms’”.<sup>92</sup> This idea came to fruition in April 2013, when the United Nations officially introduced the UN Arms Trade Treaty (ATT). This marked the first time rules were introduced to govern the arms trade. The UN ATT “represents a new multilateral framework to address arms transfers”, and as such, it is “an unprecedented agreement as it is the only legally binding effort of a global nature that is comprehensive in scope”.<sup>93</sup> While this treaty may be the key to international arms regulation, its effectiveness will “depend on which countries ratify it, and how stringently it is implemented once it comes into force.”<sup>94</sup> Ultimately, the UN ATT entered into force on December 24, 2014.<sup>95</sup> So far, it has been signed by 130 countries, and ratified by 69.

### *Canadian Arms Regulations*

Since the early 1990s, Canada has developed more stringent arms trading regulations. The Automatic Firearms Country Control List (AFCCL) was established in 1991 in an amendment to the *Export and Import Permits Act*.<sup>96</sup> This list was designed to prevent the trade of arms to countries deemed unfit to accept them. While a step in the right direction, the AFCCL

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<sup>91</sup> Regehr, “Canada and the arms trade treaty,” 3.

<sup>92</sup> Ibid.

<sup>93</sup> Garcia, “Global Norms on Arms,” 426.

<sup>94</sup> The Canadian Press, “Canada holds off on arms trade treaty even after U.S. signs,” CBC News, September 25, 2013, accessed October 14, 2014, <http://www.cbc.ca/news/politics/canada-holds-off-on-arms-trade-treaty-even-after-u-s-signs-1.1868230>.

<sup>95</sup> “The Arms Trade Treaty,” United Nations Office for Disarmament Affairs, accessed April 2, 2015, <http://www.un.org/disarmament/ATT/>.

<sup>96</sup> “Automatic Firearms Country Control List,” Government of Canada, accessed April 2, 2015, <http://laws-lois.justice.gc.ca/eng/regulations/SOR-91-575/page-1.html>.

proved insufficient by international law standards, and it became clear that more was required to ensure arms regulation in Canada.

While Canada has been a strong supporter of the creation of an international arms regulation treaty, it is noticeably absent from the list of signatories on the UN ATT. In the fall of 2013, representatives of the Canadian Government stated that the Government is “still doing consultations on whether the treaty would affect lawful recreational firearms owners in Canada”.<sup>97</sup> A number of Canadian human rights groups, as well as other stakeholders, have put pressure on the government to sign the UN ATT, and have criticized the “spurious claims” of the government as excuses to not sign and instead continue dealing arms without improved regulation.<sup>98</sup>

Interestingly, while Canada has not yet signed the UN ATT, the US became a signatory state in September of 2013. Instead of following its southern neighbour and closest ally, Canada has chosen to hold out and has refrained from signing this treaty that over two thirds of the world’s countries—even states like Congo and Colombia, which have and continue to struggle with poor regulation of arms—has accepted quickly and confidently. Scholars have noted that “Canada is emblematic of a significant group of states that would like to see the arms trade reined in to advance arms control and human security objectives but without seriously jeopardizing their particular security and economic interests.”<sup>99</sup> In the future, it will be interesting to see how Canada will balance its desire to promote its economic interests while holding fast to partnerships with signatory states, particularly the US.

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<sup>97</sup> The Canadian Press, “Canada holds off.”

<sup>98</sup> Ibid.

<sup>99</sup> Regehr, “Canada and the arms trade treaty,” 16.

## CONCLUSION

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Canada holds a small but significant place in the global arms industry. Due to its closeness to the US—geographically, economically, and politically—Canada is not a typical second-tier state in the international arms market. This proximity has allowed Canada to access invaluable research and development resources, piggyback on US-sponsored access to markets, and has cemented a strategic connection between the two countries that benefits both. As a result, Canada holds an exceptional place in the international arms industry, and continues thrive in this market.

The timeline of this research spans 6 decades. This may provide a solid foundation of data for further study of current and future trends and developments in the arms trade, both from a Canadian and international perspective. Such research could be framed similarly to this paper, offering a descriptive analysis of Canada's place in the international arms trade. An alternative research method, which could prove quite interesting, could be to use a constructivist lens to examine the normative and identity-based influences related to the trends and developments in the Canadian arms industry.

In addition, the descriptive analysis of noteworthy weapon systems purchased by recipient countries from Canada in this paper may be used as groundwork for a more in-depth examination of Canadian arms sales. Such research could focus on key industry players and their role in the development and marketing of particular weapon systems. Alternatively, this data could be used to analyze sales from a recipient country perspective. A comparative study could be conducted between Canada and other second-tier countries, or further research could be done regarding the process of particular purchases, highlighting economic, political, ideological, and strategic influences.

As Canada continues to diversify its buyer's list, most notably with Middle Eastern recipients like Saudi Arabia, it will be interesting to examine any changes in the relationship between Canada and the US, as well as Canada and other buyers, particularly those who are signatory states to the UN ATT. And as international arms regulations gain prominence, it will be interesting to see if—or, perhaps more plausibly, when—Canada will join the majority and sign the UN ATT, and whether Canada's delicate balance between economic interests and public safety remains steady or is lost.

## BIBLIOGRAPHY

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- Akerman, Anders, and Anna Larsson Seim. "The global arms trade network 1950–2007." *Journal of Comparative Economics* 42, no. 3 (2014): 535-551.
- Berthiaume, L. "Canada planning to sell guns and military equipment to developing countries to maintain domestic arms industry." *National Post*, January 5, 2014. Accessed March 26, 2014. <http://news.nationalpost.com/2014/01/05/canada-planning-to-sell-guns-and-military-equipment-to-developing-countries-to-maintain-domestic-arms-industry/>.
- Bitzinger, Richard A. "Towards a Brave New Arms Industry?" *Adelphi Papers* 43, no. 356 (May 2003): 1-102.
- Bitzinger, Richard. "The Globalization of the Arms Industry: The Next Proliferation Challenge." *International Security* 19, no. 2 (1994): 170-198.
- Brzoska, Michael, and Frederic S. Pearson. "Developments in the Global Supply of Arms: Opportunity and Motivation." *Annals of the American Academy of Political and Social Science* 535 (September 1994): 58-72.
- Campbell, Colin. "How Canada ignores shady arms sales." *Maclean's* 120, no. 43 (November 2007): 45.
- The Canadian Encyclopedia. "The Cold War." Accessed April 2, 2015. <http://www.thecanadianencyclopedia.ca/en/article/cold-war/>.
- The Canadian Press. "Canada holds off on arms trade treaty even after U.S. signs." *CBC News*, September 25, 2013. Accessed October 14, 2014. <http://www.cbc.ca/news/politics/canada-holds-off-on-arms-trade-treaty-even-after-u-s-signs-1.1868230>.
- Edgar, A.D., and D.G. Haglund. *The Canadian Defence Industry in the New Global Environment*. Montreal, QC: McGill-Queen's University Press, 1995.
- Epps, Kenneth, and Kyle Gossen. "On the Record: An audit of Canada's report on military exports, 2003-05." *Project Ploughshares*, January 2009. Accessed April 2, 2015. <http://ploughshares.ca/wp-content/uploads/2009/01/OntheRecord1.pdf>.
- Fonfría, Antonio, and Néstor Duch-Brown. "Explaining Export Performance in the Spanish Defense Industry." *Defence and Peace Economics* 23, no. 1 (2014): 51-67.
- Foreign Affairs, Trade and Development Canada. "Report on Exports of Military Goods from Canada 2007-2009." *Government of Canada*, 2010. Accessed April 2, 2015. [http://www.international.gc.ca/controls-controles/report-rapports/military\\_report-2007\\_09-rapport\\_militaire.aspx?lang=eng](http://www.international.gc.ca/controls-controles/report-rapports/military_report-2007_09-rapport_militaire.aspx?lang=eng).

- Gale Group. "The business of war: Canada has a sizeable arms industry that is joined at the hip to the huge military production system in the United States." *Canada and the World Backgrounder* 71, no. 6 (2006): 27-32.
- Garcia, Denise. "Global Norms on Arms: The Significance of the Arms Trade Treaty for Global Security in World Politics." *Global Policy* 5, no. 4 (2014): 425-432.
- Grimmett, Richard F. *Conventional Arms Transfers to Developing Nations: 1999-2006*. New York, NY: Nova Science Publishers Inc., 2008.
- Keller, William W., and Janne E. Nolan. "The Arms Trade: Business As Usual?" *Foreign Policy* 109 (Winter 1997-1998): 113-125.
- Laurance, Edward J. *The International Arms Trade*. Toronto, ON: Maxwell Macmillan Canada, 1992.
- Macleod, Alex, Stephane Roussel, and Andri Van Mens. "Hobson's Choice - Does Canada Have Any Options in Its Defence and Security Relations with the United States?" *International Journal* 55 (1999-2000): 341-354.
- Maitland, Gavin. "The Ethics of the International Arms Trade." *Business Ethics: A European Review* 7, no. 4 (1998): 200-204.
- NATO. "A short history of NATO," Accessed April 2, 2015. <http://www.nato.int/history/nato-history.html>.
- Neuman, Stephanie. "Power, Influence, and Hierarchy: Defense Industries in a Unipolar World." *Defence and Peace Economics* 21, no. 1 (2010): 105-134.
- Odom, William E., and Robert Dujarric. *America's Inadvertent Empire*. New Haven, CT: Yale University Press, 2004.
- Regehr, E. "Canada and the arms trade treaty." *Behind the Headlines* 64, no. 6 (2007): 1-28. Accessed April 2, 2015. [http://opencanada.org/wp-content/uploads/2011/05/BTH\\_Vol64\\_no6.pdf](http://opencanada.org/wp-content/uploads/2011/05/BTH_Vol64_no6.pdf).
- Stockholm International Peace Research Institute. "About SIPRI." Accessed April 2, 2015. <http://www.sipri.org/about>.
- Stockholm International Peace Research Institute. "SIPRI Arms Transfers Database – Methodology", SIPRI Arms Transfers Database, 2015. Accessed April 2, 2015. [http://www.sipri.org/databases/yy\\_armstransfers/background](http://www.sipri.org/databases/yy_armstransfers/background).
- Yanik, L. K. "Guns and Human Rights: Major Powers, Global Arms Transfers, and Human Rights Violations." *Human Rights Quarterly* 28, no. 2 (2006): 357-388.

## ANNEX 1: International Arms Exports

**Table 1. Total Arms Exports, in TIV: 1950-1991**

Supplier / Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Soviet Union	3884	3750	6305	8304	8924	5945	6486	6642	8219	8049	6499	6224	8061	7286	9035	8740	10377	11534	11032	10437	10594
United States	1713	4680	6387	8878	6029	6601	8523	8642	9692	7342	5965	6377	5719	8999	12050	11067	8335	7123	8072	11272	8627
United Kingdom	2300	3218	3249	4614	5153	4770	6069	4813	3965	3417	2145	1171	1299	1134	1417	1461	1324	1939	1503	1763	868
France	14	67	43	315	371	471	864	648	705	793	1133	955	1367	1679	1867	1613	1712	1538	1775	1214	1652
Germany				38	29	24	24	44	25	93	156	12	146	133	415	299	693	757	588	749	1462
China					3		39	30	463	361	285	35	51	11	61	434	641	432	714	645	888
Czechoslovakia	17	15	15	9	49	950	1560	1576	1530	939	623	200	173	133	267	325	412	409	495	656	421
Italy	138	117	24		7	143	257	275	234	8	104	240	258	239	369	288	234	128	162	334	275
Switzerland										50	432	500	530	329	371	484	359	253	87	104	18
Netherlands	215	58	21	7	62	255	9	8	51	48	36	108	99	79	93	100	79	182	350	111	5
Canada	38	61	274	82	292	230	244	165	469	114	50	311	188	213	252	112	97	44	192	169	182
Poland										28	5	5	12	111	237	234	319	309	288	323	268
Sweden	27	46	64	165	21	105	96	111	280	15	38	34	35	23	31	32	56	55	60	36	262
Israel				8	30			4		23					5	10	14	13	23	24	13
Spain											2	8	10	10	12	26	26	12	12	10	70
Brazil											2	12									3
Norway	1	30		8						8	38		25	55	67	65	80	140	65	53	
Yugoslavia							17		58		6				23	31				21	3
Australia			36			125						2	2							26	17
North Korea																					
Japan				2	110	38	112	4	42	1	61	104	11	16			5			34	
South Korea																					
Libya																					
Austria															0	0	1	1	1	1	1
Romania																					
Egypt							9	6	4	4		0	7	8	2		13		26	15	37
Germany											17	25	17	29	39	26					
Denmark											20				60	20		131	28	3	
Finland											60	1				1	86	33	33	33	2
Unknown country	23	12				2	17	17	17	17	17	19	5	1	1	2	4	14	0	0	
Singapore																					
South Africa									8	27	33							4	6		3
Belgium					9	9	29				3	0	2	1	1		12			5	
Iran													3						28		23
Syria																					14
Jordan									2												
Portugal																			2		
Iraq								0			3										
Hungary								5									18	18	37	28	
Supplier / Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Taiwan																		12			



DR Congo																						
El Salvador																						
Gabon																						
Guatemala						1																
Mozambique																						
Philippines																						
Iceland																						
Niger																						
Uganda																				0		
United Nations															0							
Ukraine																						
Belarus																						
Czech Republic																						
Slovakia																						
Moldova																						
Kazakhstan																						
Georgia																						
Kyrgyzstan																						
Qatar																						
Cyprus																						
Serbia																						
Aruba																						
Latvia																						
Estonia																						
Sri Lanka																						
Bahrain																						
Cambodia																						
Croatia																						
Eritrea																						
Malawi																						
Afghanistan																						
<b>Total</b>	8371	12055	16419	22424	20957	19772	24280	23097	25719	21360	17674	16332	18121	20491	26697	25371	24922	25127	25565	28098	25718	

Table 1. CONTINUED: Total Arms Exports, in TIV: 1950-1991

Supplier / Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Total	Percentage of Total	
<b>Soviet Union</b>	11308	13221	14619	14484	11077	9487	15268	17915	17079	17743	16572	15965	14517	13936	14680	14577	13442	12890	12537	10166	5671	453481	36.41%	
<b>United States</b>	11508	10601	11850	12013	15951	15531	14596	14108	9709	10653	13450	13964	13734	11678	10568	11382	12158	11712	11326	10814	12510	421909	33.87%	
<b>United Kingdom</b>	2149	2493	2740	2338	2316	2446	2304	2137	1481	1687	2403	2550	2569	2570	2197	2040	3586	2549	3521	1879	1526	107073	8.60%	
<b>France</b>	2286	2601	2877	2091	2165	2015	2679	3328	3019	3854	3828	3856	3414	2991	3806	3029	1766	1879	2213	1682	1107	77282	6.20%	
<b>Germany</b>	1366	1378	226	1209	1483	1705	1904	1628	1459	1648	2029	1677	2395	2950	1378	1554	1171	1657	1347	1831	2543	40225	3.23%	
<b>China</b>	1303	1272	694	451	656	613	225	631	572	964	657	1586	1836	2009	1328	1920	2669	1432	1046	945	1330	29232	2.35%	
<b>Czechoslovakia</b>	414	642	661	860	705	795	797	831	792	781	900	908	1032	1081	1005	1227	1284	1339	1050	613	408	28899	2.32%	
<b>Italy</b>	365	292	342	425	747	669	631	687	1337	1167	1696	1693	1198	1309	922	225	597	377	335	205	342	19395	1.56%	
<b>Switzerland</b>	37	29	19	37	307	335	279	231	434	610	639	499	380	509	353	319	308	318	261	404	432	10257	0.82%	
<b>Netherlands</b>	161	143	205	73	64	306	417	357	309	623	812	688	474	366	175	323	483	724	556	409	448	10092	0.81%	
<b>Canada</b>	279	311	100	108	35	208	114	175	159	148	118	251	120	97	89	262	270	153	49	92	115	7032	0.56%	
<b>Poland</b>	274	272	158	232	299	406	382	317	229	207	346	211	115	90	130	274	222	232	20	105	55	6715	0.54%	
<b>Sweden</b>	550	130	16	76	125	73	53	54	263	165	138	130	114	229	211	340	263	521	412	243	177	5875	0.47%	
<b>Israel</b>	21	31	17	50	120	62	201	211	188	272	215	252	412	279	209	352	137	75	212	85	152	3720	0.30%	
<b>Spain</b>	140	4	4	84	267	46	25	38	18	10	130	251	357	267	85	174	147	126	174	108	100	2753	0.22%	
<b>Brazil</b>	0			32	58	103	144	178	70	156	62	122	196	269	208	151	179	216	47	96	114	2418	0.19%	
<b>Norway</b>	8	31	10		8	8	8	93	161	158	278	68	35		42	29	54	34	124	82	167	2033	0.16%	
<b>Yugoslavia</b>	21		27		14	41	75	53	33	101	91	24	47	71	94	8	2	16	18	80	515	1490	0.12%	
<b>Australia</b>	36	6	72	92	131	113	62	21	22	15	15	24	21	58	13	57	89	18	22	154	85	1334	0.11%	
<b>North Korea</b>				11	12				20	29	5	148	250	90	57	65	213	190	14	4	113	1221	0.10%	
<b>Japan</b>	15	4	17	41				9	11	167			17	17	55	99			15	30	68	1105	0.09%	
<b>South Korea</b>		141							105	105	130	65		126	33	78		51	48	72	118	1072	0.09%	
<b>Libya</b>		0	0		26	4		8	398	95	107	168	14	54	32	10	14	62	7	36		1035	0.08%	
<b>Austria</b>	1	1	1	0	0			37	126	54	73	60	56	58	348	40	30	12	12	30	20	964	0.08%	
<b>Romania</b>	6	9	9	1				27	55	62	44	106	117	188	114	43	50	67	39	11	6	954	0.08%	
<b>Egypt</b>					16		69	80	13	29	77	80	70	36	5	19	61	65	61	22		834	0.07%	
<b>Germany</b>				11		12	26	14	35	35	43	3				39	116	116	149	77		829	0.07%	
<b>Denmark</b>					23					18	29	64	115				116	40		71	10	748	0.06%	
<b>Finland</b>	39	30		63	63			63	63			20						1			22	613	0.05%	
<b>Unknown country</b>	4	15	4	7	15	7	1	12	31	29	42	21	9	2	7	87	2	14	10	10	10	507	0.04%	
<b>Singapore</b>	2				17			30	72		15		25	93			81	25	87	44	3	494	0.04%	
<b>South Africa</b>	5	12	1	2	18	16	0			39	39	1			50	50	53	50	0		54	471	0.04%	
<b>Belgium</b>								2	3	1	19	41	89	118	3	22		18	36	1	1	425	0.03%	
<b>Iran</b>	6	106	6	123	84					0	0	0	0	1	1	1	1	1	1	1	1	387	0.03%	
<b>Syria</b>				2	2		0					178	46	2	29	31		15				319	0.03%	
<b>Jordan</b>	36		22	9	50		18						76		2	16		7	16			254	0.02%	
<b>Portugal</b>	3		4	11	101	21		7	2	1			1			1	1		71			226	0.02%	
<b>Iraq</b>										28								168	20			219	0.02%	
<b>Hungary</b>		8	44	8	8					4	30	4	4									216	0.02%	
<b>Taiwan</b>		154							1										42	6		215	0.02%	
<b>Pakistan</b>	3									15	30	30							1	82	3	170	0.01%	
Supplier / Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Total	Percentage of Total	
<b>Bulgaria</b>													4			106				5	6	42	163	0.01%

India	6	2	21	24	31			27	22			2					0	1	0	3	0	141	0.01%	
Argentina		11				1			8	1	24	3	1	9			4			6	0	86	0.01%	
Ethiopia															22		51					73	0.01%	
Saudi Arabia		2				1	13				33			3	9							68	0.01%	
New Zealand		0	2	5	3						1	2		10	7	0					34	66	0.01%	
South Yemen					6											51						57	0.00%	
Peru												53										53	0.00%	
Indonesia								9		4					8	4						44	0.00%	
Turkey									23	11												34	0.00%	
Kuwait										24					4							31	0.00%	
Cuba					1			12	10	8												31	0.00%	
Venezuela					13												0					30	0.00%	
Albania																						26	0.00%	
UAE				8									14				1			2		25	0.00%	
Ireland								2	9	9	2											22	0.00%	
Chad																	20					20	0.00%	
Chile					0			0	0	0			1			3	3	4	4		3	18	0.00%	
Morocco								6														14	0.00%	
Malaysia	7											6										13	0.00%	
Nicaragua																			4	5		12	0.00%	
Algeria										6												12	0.00%	
Kenya											8											2	10	0.00%
Oman							5									5						10	0.00%	
Uruguay																						6	0.00%	
Ghana									6													6	0.00%	
Nigeria																			2	3		5	0.00%	
Sudan																4						5	0.00%	
Viet Nam		5																				5	0.00%	
Russia																	4					4	0.00%	
Mexico																						4	0.00%	
South Vietnam																						4	0.00%	
Angola									3	0												3	0.00%	
Zimbabwe																						3	0.00%	
North Yemen																3						3	0.00%	
Senegal						3																3	0.00%	
Greece																						2	0.00%	
Bangladesh															2							2	0.00%	
Guyana						2																2	0.00%	
Lebanon																						1	2	0.00%
Panama									2													2	0.00%	
Zambia																					2	2	0.00%	
Cote d'Ivoire	1																					1	0.00%	
Supplier / Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Total	Percentage of Total	
DR Congo									1													1	0.00%	
El Salvador																						1	1	0.00%



Table 2. Total Arms Exports, in TIV: 1992-2013

Supplier / Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Percentage of Total	
United States	13991	13889	11498	11185	10893	14546	15837	11587	7558	5691	4943	5569	6637	6605	7411	7750	6743	6874	8158	8945	8950	6153	201413	38.11%	
Russia	2650	3459	1503	3861	3527	3201	2024	4120	4043	5936	5638	5322	6189	5229	5096	5556	6343	5112	5962	8495	8391	8283	109941	20.80%	
Germany	1453	1576	2747	1467	1975	953	1833	1867	1615	919	917	1745	1151	2095	2710	3257	2402	2568	2722	1361	1177	972	39482	7.47%	
France	1150	885	865	956	1894	3242	3137	1842	1115	1454	1466	1439	2342	1829	1718	2395	2067	1979	917	1750	1076	1489	37008	7.00%	
United Kingdom	1192	1457	1509	1449	1642	2397	1416	1384	1645	1394	1102	752	1201	1039	973	1009	1002	1021	1137	1040	923	1394	28079	5.31%	
China	712	1438	1114	1019	771	436	354	333	303	515	519	693	381	315	625	466	581	1077	1419	1342	1704	1837	17952	3.40%	
Netherlands	364	455	631	458	479	590	598	349	284	203	234	336	218	526	1155	1210	460	485	381	533	773	302	11025	2.09%	
Italy	247	336	204	297	326	454	426	494	202	243	463	357	251	827	527	713	388	489	476	924	790	807	10241	1.94%	
Ukraine	165	85	236	168	260	559	731	764	277	539	310	296	200	295	539	626	375	381	473	550	1510	589	9925	1.88%	
Israel	324	383	296	166	285	246	229	190	387	437	548	388	625	413	359	539	327	704	587	577	514	773	9297	1.76%	
Sweden	168	114	122	197	345	100	326	384	368	908	171	526	303	537	397	347	457	427	664	700	490	505	8557	1.62%	
Spain	65	98	236	82	105	625	170	43	46	8	16	95	52	107	839	600	602	961	277	1437	706	605	7775	1.47%	
Switzerland	396	184	133	139	186	118	209	273	174	206	157	181	249	247	286	295	457	227	238	310	231	205	5103	0.97%	
Canada	143	146	167	263	159	95	40	79	74	129	172	267	270	228	228	338	229	180	242	307	271	199	4223	0.80%	
South Korea		60	7	27	64	60	72		10	228		96	73	108	158	279	178	267	197	331	218	307	2738	0.52%	
Belarus		8		8	131	369	64	459	293	49	64	57	21	54	43	6	226	42	160	98	97	338	2586	0.49%	
Poland	56		131	176	46	21	1	64	45	81	56	81	47	18	282	163	73	75	28	8	10	131	1594	0.30%	
South Africa	75	54	11	17	31	7	24	27	20	37	17	43	72	30	184	126	139	103	233	69	185	76	1578	0.30%	
Belgium			33	167	59	94	46	45	26	37	37	15	47	146	59	19	217	243	8	111	22	52	1483	0.28%	
Norway	75	51	64	21	4	19	3	5	3	42	83	84	66	12	17	61	114	147	159	156	158	64	1409	0.27%	
Czech Republic		152	274	131	114	22	20	54	79	87	59	64	1	73	44	32	34	24	5	11	8	7	1294	0.24%	
North Korea	131	137	24	41	47	47	81	55	58	73	162	134	47	20	20	20	20	20					1133	0.21%	
Uzbekistan												252	126	4				209	209	209			1009	0.19%	
Finland	11	13	22	26	9	10	34	28	12	33	34	44	34	47	137	77	77	51	58	40	103	94	992	0.19%	
Denmark		241	330	8			1	6	20	1	10	62	173		9	6	17	14	8	22	23	9	957	0.18%	
Japan	126	153	162	158	188	32										40							858	0.16%	
Australia	6	60	36	36	16	20	4			43	47		44	2	49	14	18	25	72	115	143	45	63	856	0.16%
Brazil	91	36	54	33	23	23	16				26		46	1	44	53	92	37	151	31	33	36	826	0.16%	
Slovakia		173	33	97	60	55	10	125	37	53	31		48		7	22	8				3		761	0.14%	
Turkey				3	3	0	3	43	19	5	26	42	28	13	72	40	69	37	43	33	101	82	662	0.13%	
Bulgaria	16	28	55	1	21	4	39	167	2	10	32	47	19	87	5	9	4	16	4	2	7	6	579	0.11%	
Austria	20	10	17			1	11	23	24	17	83	3	3	4	63	100	15	30	36	34	10	1	504	0.10%	
Moldova	11		36			217			6	42	60	10		18	3	19	29	20		11			483	0.09%	
Unknown country	3	38	57	9	75	10	3	2	11	22	21	14	10	44	3	0	35	13	24	3	16	7	418	0.08%	
Romania	14	16	30	9	4	12	2	19	3			24		3	8	32		2	1	1	108	108	395	0.07%	
Libya			3			3	10				21	16	113	113	18	10	18	32	28				385	0.07%	
Iran	1	1	1	1	2	1	0	0	0	0	3	9	1	2	92		42	45	45	85	10	12	352	0.07%	
Singapore	3	11	30		0	46	23	11	11		4		66	3				31	24	13	76	1	352	0.07%	
Jordan			64			6							42	20		13	12	60	79		12	1	309	0.06%	
Kazakhstan				13	12	3	6	183	19	12			5		6								260	0.05%	
Indonesia		16	16	25		8		49		16	49		25	8	8		1					4	226	0.04%	

Supplier / Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Percentage of Total
UAE				28	6	32							3	11	17	3	1	34	39	3		43	219	0.04%
Georgia								48	72		72		17										209	0.04%
Czechoslovakia	207																						207	0.04%
Kyrgyzstan				61								92			18	18	14						203	0.04%
India	1	9	2	2	0	0	0	0	21	2	0	4	27	19	33	21	11	27	5	6	2	10	202	0.04%
Montenegro															71	109			18				198	0.04%
Ireland														15	30	29	26	26	25	1	25	1	179	0.03%
Hungary		21		6		24					34			82		9							176	0.03%
Greece	15	10	18		19	31	9	3	2	2		6	22	13	23								172	0.03%
Portugal		1															99	46		0	0		147	0.03%
Serbia					20	5				11					5	5	45	1	31	4	11	9	147	0.03%
Chile	1				29		2	1	1		1						100						135	0.03%
Syria	40	40			0	0									3			20	20				123	0.02%
Thailand												7	7		93								107	0.02%
Nicaragua	76	21		5																			103	0.02%
Kuwait							99																99	0.02%
Saudi Arabia		14			1										18				1	58			92	0.02%
New Zealand	4		3					1	1		1		1	0							75		87	0.02%
Egypt	13	22	15	9	5	5																	69	0.01%
Pakistan			2						3	1	9	8	9	24	4		1						61	0.01%
Qatar		40						9							6								54	0.01%
Venezuela													1		7		3	40					51	0.01%
Lebanon											45												45	0.01%
Cyprus					43																		43	0.01%
Taiwan					4	5				6	0							16			2		35	0.01%
Argentina		11	4	5					2	6					2						1		32	0.01%
Yugoslavia	32																						32	0.01%
Brunei																				24			24	0.00%
Angola	20										2												22	0.00%
Peru										14			5										20	0.00%
Ghana														19									19	0.00%
Aruba					18																		18	0.00%
Bosnia and Herzegovina											4										14		18	0.00%
Ethiopia						17																	17	0.00%
Viet Nam															14								14	0.00%
Malaysia				0				11										0					11	0.00%
Malta													10										10	0.00%
Latvia			9																				9	0.00%
Estonia					8																		8	0.00%
Sri Lanka							8																8	0.00%
Colombia											5												5	0.00%
Iceland		5																					5	0.00%
Botswana																						4	4	0.00%

Supplier / Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Percentage of Total
Philippines																4							4	0.00%
Zimbabwe										4													4	0.00%
Lithuania											3												3	0.00%
Bahrain										2													2	0.00%
Cambodia		0	0	0					1														2	0.00%
Croatia									2														2	0.00%
Eritrea							2	0															2	0.00%
Kenya		2																					2	0.00%
Malawi									1														1	0.00%
Afghanistan	1																						1	0.00%
Oman			0											1									1	0.00%
Uruguay									1														1	0.00%
Albania																				0			0	0.00%
Costa Rica																	0						0	0.00%
Luxembourg																0							0	0.00%
<b>Total</b>	24070	25954	22804	22827	23909	28772	27926	25146	18894	19516	17758	19225	21285	21353	24498	26444	24178	24286	25405	29795	28871	25570	528487	528487



Table 3. CONTINUED: Top 25 Arms Exporters, in TIV: 1950-1991

Rank	Supplier/ Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Total	Percentage of Total
1	<b>Soviet Union</b>	11308	13221	14619	14484	11077	9487	15268	17915	17079	17743	16572	15965	14517	13936	14680	14577	13442	12890	12537	10166	5671	453481	36.41%
2	<b>United States</b>	11508	10601	11850	12013	15951	15531	14596	14108	9709	10653	13450	13964	13734	11678	10568	11382	12158	11712	11326	10814	12510	421909	33.87%
3	<b>United Kingdom</b>	2149	2493	2740	2338	2316	2446	2304	2137	1481	1687	2403	2550	2569	2570	2197	2040	3586	2549	3521	1879	1526	107073	8.60%
4	<b>France</b>	2286	2601	2877	2091	2165	2015	2679	3328	3019	3854	3828	3856	3414	2991	3806	3029	1766	1879	2213	1682	1107	77282	6.20%
5	<b>Germany</b>	1366	1378	226	1209	1483	1705	1904	1628	1459	1648	2029	1677	2395	2950	1378	1554	1171	1657	1347	1831	2543	40225	3.23%
6	<b>China</b>	1303	1272	694	451	656	613	225	631	572	964	657	1586	1836	2009	1328	1920	2669	1432	1046	945	1330	29232	2.35%
7	<b>Czechoslovakia</b>	414	642	661	860	705	795	797	831	792	781	900	908	1032	1081	1005	1227	1284	1339	1050	613	408	28899	2.32%
8	<b>Italy</b>	365	292	342	425	747	669	631	687	1337	1167	1696	1693	1198	1309	922	225	597	377	335	205	342	19395	1.56%
9	<b>Switzerland</b>	37	29	19	37	307	335	279	231	434	610	639	499	380	509	353	319	308	318	261	404	432	10257	0.82%
10	<b>Netherlands</b>	161	143	205	73	64	306	417	357	309	623	812	688	474	366	175	323	483	724	556	409	448	10092	0.81%
11	<b>Canada</b>	279	311	100	108	35	208	114	175	159	148	118	251	120	97	89	262	270	153	49	92	115	7032	0.56%
12	<b>Poland</b>	274	272	158	232	299	406	382	317	229	207	346	211	115	90	130	274	222	232	20	105	55	6715	0.54%
13	<b>Sweden</b>	550	130	16	76	125	73	53	54	263	165	138	130	114	229	211	340	263	521	412	243	177	5875	0.47%
14	<b>Israel</b>	21	31	17	50	120	62	201	211	188	272	215	252	412	279	209	352	137	75	212	85	152	3720	0.30%
15	<b>Spain</b>	140	4	4	84	267	46	25	38	18	10	130	251	357	267	85	174	147	126	174	108	100	2753	0.22%
16	<b>Brazil</b>	0			32	58	103	144	178	70	156	62	122	196	269	208	151	179	216	47	96	114	2418	0.19%
17	<b>Norway</b>	8	31	10		8	8	8	93	161	158	278	68	35		42	29	54	34	124	82	167	2033	0.16%
18	<b>Yugoslavia</b>	21		27		14	41	75	53	33	101	91	24	47	71	94	8	2	16	18	80	515	1490	0.12%
19	<b>Australia</b>	36	6	72	92	131	113	62	21	22	15	15	24	21	58	13	57	89	18	22	154	85	1334	0.11%
20	<b>North Korea</b>				11	12				20	29	5	148	250	90	57	65	213	190	14	4	113	1221	0.10%
21	<b>Japan</b>	15	4	17	41				9	11	167			17	17	55	99			15	30	68	1105	0.09%
22	<b>South Korea (ROK)</b>		141							105	105	130	65		126	33	78		51	48	72	118	1072	0.09%
23	<b>Libya</b>		0	0		26	4		8	398	95	107	168	14	54	32	10	14	62	7	36		1035	0.08%
24	<b>Austria</b>	1	1	1	0	0			37	126	54	73	60	56	58	348	40	30	12	12	30	20	964	0.08%
25	<b>Romania</b>	6	9	9	1				27	55	62	44	106	117	188	114	43	50	67	39	11	6	954	0.08%

Table 4. Top 25 Arms Exporters, in TIV: 1992-2013

Rank	Supplier / Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Percentage of Total
1	United States	13991	13889	11498	11185	10893	14546	15837	11587	7558	5691	4943	5569	6637	6605	7411	7750	6743	6874	8158	8945	8950	6153	201413	38.11%
2	Russia	2650	3459	1503	3861	3527	3201	2024	4120	4043	5936	5638	5322	6189	5229	5096	5556	6343	5112	5962	8495	8391	8283	109941	20.80%
3	Germany	1453	1576	2747	1467	1975	953	1833	1867	1615	919	917	1745	1151	2095	2710	3257	2402	2568	2722	1361	1177	972	39482	7.47%
4	France	1150	885	865	956	1894	3242	3137	1842	1115	1454	1466	1439	2342	1829	1718	2395	2067	1979	917	1750	1076	1489	37008	7.00%
5	United Kingdom	1192	1457	1509	1449	1642	2397	1416	1384	1645	1394	1102	752	1201	1039	973	1009	1002	1021	1137	1040	923	1394	28079	5.31%
6	China	712	1438	1114	1019	771	436	354	333	303	515	519	693	381	315	625	466	581	1077	1419	1342	1704	1837	17952	3.40%
7	Netherlands	364	455	631	458	479	590	598	349	284	203	234	336	218	526	1155	1210	460	485	381	533	773	302	11025	2.09%
8	Italy	247	336	204	297	326	454	426	494	202	243	463	357	251	827	527	713	388	489	476	924	790	807	10241	1.94%
9	Ukraine	165	85	236	168	260	559	731	764	277	539	310	296	200	295	539	626	375	381	473	550	1510	589	9925	1.88%
10	Israel	324	383	296	166	285	246	229	190	387	437	548	388	625	413	359	539	327	704	587	577	514	773	9297	1.76%
11	Sweden	168	114	122	197	345	100	326	384	368	908	171	526	303	537	397	347	457	427	664	700	490	505	8557	1.62%
12	Spain	65	98	236	82	105	625	170	43	46	8	16	95	52	107	839	600	602	961	277	1437	706	605	7775	1.47%
13	Switzerland	396	184	133	139	186	118	209	273	174	206	157	181	249	247	286	295	457	227	238	310	231	205	5103	0.97%
14	Canada	143	146	167	263	159	95	40	79	74	129	172	267	270	228	228	338	229	180	242	307	271	199	4223	0.80%
15	South Korea		60	7	27	64	60	72		10	228		96	73	108	158	279	178	267	197	331	218	307	2738	0.52%
16	Belarus		8		8	131	369	64	459	293	49	64	57	21	54	43	6	226	42	160	98	97	338	2586	0.49%
17	Poland	56		131	176	46	21	1	64	45	81	56	81	47	18	282	163	73	75	28	8	10	131	1594	0.30%
18	South Africa	75	54	11	17	31	7	24	27	20	37	17	43	72	30	184	126	139	103	233	69	185	76	1578	0.30%
19	Belgium			33	167	59	94	46	45	26	37	37	15	47	146	59	19	217	243	8	111	22	52	1483	0.28%
20	Norway	75	51	64	21	4	19	3	5	3	42	83	84	66	12	17	61	114	147	159	156	158	64	1409	0.27%
21	Czech Republic		152	274	131	114	22	20	54	79	87	59	64	1	73	44	32	34	24	5	11	8	7	1294	0.24%
22	North Korea	131	137	24	41	47	47	81	55	58	73	162	134	47	20	20	20	20	20					1133	0.21%
23	Uzbekistan												252	126	4				209	209	209			1009	0.19%
24	Finland	11	13	22	26	9	10	34	28	12	33	34	44	34	47	137	77	77	51	58	40	103	94	992	0.19%
25	Denmark		241	330	8			1	6	20	1	10	62	173		9	6	17	14	8	22	23	9	957	0.18%



Table 1. CONTINUED: Canadian Arms Exports by Recipient, in TIV: 1950-1991

Rank	Recipient / Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Total	Percentage of Total
1	United States	110								1		1		8	27	34	58	59	29	3		13	1684	23.81%
2	Brazil	13							2	4	4	4	4	8	14	14	12	12	12	12	12	11	454	6.46%
3	Turkey	9	9	9													67	67					454	6.46%
4	Belgium								5	15													368	5.24%
5	Peru	115	115	7				3	3								5	26				6	290	4.12%
6	Greece											5	5										234	3.33%
7	France			1	2	2	3	3	5	9	2	6	3	2							8	18	206	2.93%
8	Australia	4												36				3	5	7	11	14	189	2.69%
9	Norway			49	54																		177	2.52%
10	Kenya		8					40	40								26	26			18		177	2.52%
11	Egypt												132		6	2	7	6	3		8		164	2.34%
12	Malaysia		15										1	13	12								155	2.21%
13	Spain				24	24				8							2	2	14	8	10		138	1.96%
14	Mexico						6			1	50	11	5	5			16	13	4	4	3	2	137	1.95%
15	South Africa																				1	4	135	1.92%
16	India															5	5	10	5				132	1.88%
17	Germany	1	1	2	2	2	2	2	2	1	1	1	1								3	3	131	1.87%
18	Denmark		99						1														118	1.68%
19	Zambia	4					93																113	1.61%
20	Tanzania	12								79													113	1.61%
21	Venezuela		58		6								11				9	10					112	1.59%
22	UAE	4							53				22			1	5						101	1.44%
23	Netherlands								5	5	10	10	10	10						6			100	1.42%
24	Chile							14			19								35				95	1.35%
25	Iraq										3	3	4	21		6	12	12	23	5	2		91	1.30%

Table 2. Canadian Arms Exports by Recipient, in TIV: 1992-2013

Rank	Recipient / Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Percentage of Total		
1	United States		7	57	106		2	3	1	8	31	115	172	128	128	141	145	155	115	178	188	161	71	1912	45.24%		
2	Saudi Arabia	68	68	57	57	59	28	25	23	20	6	5	5	17		8	12	10	3		26	40	42	579	13.70%		
3	Australia			8	27	22						1	30	38	18										144	3.41%	
4	United Kingdom																138								138	3.27%	
5	Brazil									1		10	6	7	7	15	16	11	11	6	6	3			99	2.34%	
6	Botswana					16	53			26													3		98	2.32%	
7	France	15	16	15	20	8	8																		82	1.94%	
8	Sweden													10	20	40		10								80	1.89%
9	Ireland			5					29		29			5												68	1.61%
10	Greece									2	7	9	9	20	20											67	1.59%
11	South Korea									3	12	12	12	9	6	6	3									63	1.49%
12	Taiwan	33	30																							63	1.49%
13	Denmark								18		36															54	1.28%
14	Netherlands				12	38	2																			52	1.23%
15	Portugal	12	12															2	10	8	4					48	1.14%
16	Poland												4	6	6		4	4					11	9		44	1.04%
17	Colombia	4	4										5			3	6	12	2	3				4		43	1.02%
18	Mexico	1										9				1			4	4	12	4				35	0.83%
19	South Africa			7	14	14																				35	0.83%
20	Chile				20														2	7	4					33	0.78%
21	UAE																			2	13	11	5			31	0.73%
22	Spain			4	4			2		2	2	4	4	4	4											30	0.71%
23	Thailand	6	2	5				6	4										6							29	0.69%
24	Singapore		6	8	4													11								29	0.69%
25	Turkey																			3	12	9	4			28	0.66%

**Table 3. Canadian Arms Exports by Weapon Category, in TIV: 1950-1991**

Rank	Weapon Category / Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1	Aircraft	31	61	270	76	184	211	187	150	390	90	50	311	188	213	252	112	97	44	192	169	182
2	Engines																					
3	Ships	7				81		57	14	79	24											
4	Sensors																					
5	Armoured vehicles					21	15															
6	Artillery			4	6	6	4															
7	Other																					
	<b>Total</b>	38	61	274	82	292	230	244	165	469	114	50	311	188	213	252	112	97	44	192	169	182

**Table 3. CONTINUED: Canadian Arms Exports by Weapon Category, in TIV: 1950-1991**

Rank	Weapon Category / Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Total	Percentage of Total
1	Aircraft	279	311	100	108	35	208	104	159	105	74	49	196	53	3	13	111	107	18		26	15	5536	78.73%
2	Engines								2	15	35	29	30	49	59	37	66	79	65	38	56	64	626	8.90%
3	Ships									11									35				309	4.39%
4	Sensors							10	13	28	13	28	25	10	8	5	27	25	24	8	10	36	267	3.80%
5	Armoured vehicles								1			1		8	27	34	58	59	11	3			237	3.37%
6	Artillery											12											32	0.46%
7	Other										26												26	0.37%
	<b>Total</b>	279	311	100	108	35	208	114	175	159	148	118	251	120	97	89	262	270	153	49	92	115	7032	

**Table 4. Canadian Arms Exports by Weapon Category, in TIV: 1992-2013**

Rank	Weapon Category / Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Percentage of Total
1	Armoured vehicles	68	68	65	86	72	28	28	23	20	6	85	178	165	125	116	125	134	101	81	149	136	79	1936	45.84%
2	Engines	15	13	15	32	41	15	10	9	19	52	55	69	70	61	71	74	80	79	89	118	95	103	1184	28.04%
3	Aircraft	15	22	72	122	46	53		18	26	43	16	11	20	23	0	138	4		64	34	40	17	785	18.59%
4	Sensors	45	42	9	4			2		8		16	10	16	20	40		10		8	5			234	5.54%
5	Ships				20				29		29													77	1.82%
6	Missiles			5																				5	0.12%
7	Artillery									1							1							3	0.07%
	<b>Total</b>	143	146	167	263	159	95	40	79	74	129	172	267	270	228	228	338	229	180	242	307	271	199	4223	

## ANNEX 3: Trade Registers

**Table 1. Trade Register of Major Conventional Weapons, 1950-1991: Canada as Supplier**

Recipient	No. ordered	Weapon Designation	Weapon Description	Year of Order/License	Year(s) of Deliveries	No. Delivered/Produced	Comments
Australia	2	DHC-3 Otter	Light transport aircraft	1953	1935	2	
	5	DHC-2 Beaver	Transport aircraft	1955	1955-1961	5	
	18	DHC-4 Caribou	Transport aircraft	1963	1963-1965	18	GBP8 m deal
	7	DHC-4 Caribou	Transport aircraft	1964	1966	7	
	4	DHC-4 Caribou	Transport aircraft	1968	1968-1971	4	
	2	Boeing-707	Transport aircraft	1983	1983	2	Second-hand; \$8 m deal
Belgium	67	PT6	Turboprop	1986	1986	67	For 67 PC-9 trainer aircraft from Switzerland; PT-6A-62 version
	54	CF-100 Canuck	Fighter aircraft	1956	1957-1958	54	CF-100 Mk-5 version
	3	Algerine	Minesweeper	1959	1959	3	Second-hand; Belgian designation De Moor; for use as OPV
	4	SQS-505	ASW sonar	1973	1978-1979	4	For 4 Wielingen frigates produced in Belgium; SQS-505A version
Brazil	2	S-2A Tracker	ASW aircraft	1960	1961	2	Brazilian designation P-16
	18	DHC-5 Buffalo	Transport aircraft	1965	1968-1970	18	DHC-5A version; Brazilian designation C-115
	6	DHC-5 Buffalo	Transport aircraft	1967	1970-1971	6	DHC-5A version; Brazilian designation C-115
	40	PT6	Turboprop	1975	1978-1985	40	For 20 EMB-111 (P-95) MP aircraft produced in Brazil; PT-6A-34 version
Egypt	168	PT6	Turboprop	1980	1983-1991	168	For 168 EMB-312 (T-27/AT-27) trainer aircraft produced in Brazil; PT-6A-25C version
	10	DHC-5 Buffalo	Transport aircraft	1981	1982	10	\$101 m deal
	40	PT6	Turboprop	1983	1984-1988	40	For 40 EMB-312 trainer aircraft from Brazil; PT-6A-25C version
Greece	14	PT6	Turboprop	1989	1990	14	PT-6A-25C version for 14 EMB-312 trainer aircraft from Brazil
	104	F-86F Sabre	Fighter aircraft	1953	1954-1955	104	Second-hand; aid; CL-13 Sabre-2 and Sabre-4 versions
	9	T-33A Shooting Star	Trainer aircraft	1954	1955	9	
	22	T-33A Shooting Star	Trainer aircraft	1957	1958-1959	22	
	10	PT6	Turboprop	1978	1979	10	For 5 AB-212ASW ASW helicopters from Italy
India	2	SQS-505	ASW sonar	1980	1981-1982	2	For 2 Kortenaer frigates from Netherlands
	14	PT6	Turboprop	1982	1984	14	For 7 AB-212ASW ASW helicopters from Italy
	26	DHC-3 Otter	Light transport aircraft	1956	1963	26	
	5	DHC-3 Otter	Light transport aircraft	1962	1963	5	Aid during border war with China
	36	T-6 Texan	Trainer aircraft	1962	1963	36	Second-hand; aid; Harvard-4 version
	6	DC-3/C-47 Skytrain	Transport aircraft	1963	1963-1964	6	Second-hand; aid
	16	DHC-4 Caribou	Transport aircraft	1963	1967	16	\$12.5 m deal
Kenya	3	DHC-3 Otter	Light transport aircraft	1967	1968	3	
	4	DHC-4 Caribou	Transport aircraft	1967	1985-1988	4	
	5	SQS-505	ASW sonar	1984		5	For modernization of 5 Leander (Nilgiri) frigates
	3	DHC-2 Beaver	Light aircraft	1964	1964	3	
	4	DHC-4 Caribou	Transport aircraft	1964	1965	4	
	8	DHC-2 Beaver	Light aircraft	1966	1966	8	
Malaysia	2	DHC-4 Caribou	Transport aircraft	1970	1972	2	
	6	DHC-5 Buffalo	Transport aircraft	1976	1977-1978	6	
	4	DHC-5 Buffalo	Transport aircraft	1986	1986-1987	4	Financed by Canada
	3	Dash-8	Transport aircraft	1989	1990	3	Dash-8-100 version
	4	DHC-4 Caribou	Transport aircraft	1965	1966	4	Aid
	20	CL-41G Tutor	Trainer/combat aircraft	1966	1967-1969	20	Incl for combat role; Malaysian designation Tebuan
	16	DHC-4 Caribou	Transport aircraft	1968	1969-1972	16	
	44	PT6	Turboprop	1981	1982-1984	44	For 44 PC-7 trainer aircraft from Switzerland; PT-6A-25A version

Recipient	No. ordered	Weapon Designation	Weapon Description	Year of Order/License	Year(s) of Deliveries	No. Delivered/Produced	Comments
Peru	4	DHC-2 Beaver	Light aircraft	1949	1950	4	
	2	DHC-2 Beaver	Light aircraft	1963	1965	2	
	3	DHC-6 Twin Otter	Transport aircraft	1965	1966	3	DHC-6-100 version
	16	DHC-5 Buffalo	Transport aircraft	1970	1971-1972	16	DHC-5A version
	8	DHC-6 Twin Otter	Transport aircraft	1970	1971-1972	8	DHC-6-300 version
	3	DHC-6 Twin Otter	Transport aircraft	1972	1973	3	DHC-6-300 version
	2	APS-504(V)	MP aircraft radar	1976	1977-1978	2	For 2 F-27 Maritime MP aircraft from Netherlands
	20	PT6	Turboprop	1984	1987	20	For 20 EMB-312 trainer aircraft from Brazil; PT-6A-25C version
	8	DHC-6 Twin Otter	Transport aircraft	1985	1986-1987	8	21 m deal; DHC-6-100 version; aid
South Africa	10	PT6	Turboprop	1991	1991	10	For 10 EMB-312 trainer aircraft from Brazil; PT-6A-25C version
	37	F-86F Sabre	Fighter aircraft	1954	1956	37	CL-13B Sabre-6 version
Turkey	7	PT6	Turboprop	1989	1990-1991	7	For 7 PC-7 trainer aircraft from Switzerland (for 'homeland' Bophuthatswana)
	20	9.2in Coastal Gun	Coastal gun	1950	1952-1955	20	Second-hand; financed by US aid
	105	F-86F Sabre	Fighter aircraft	1953	1954-1955	105	Second-hand; CL-13 Sabre-2/4 versions
	24	T-34 Mentor	Trainer aircraft	1956	1957	24	Second-hand (but maximum only few years old); aid
	10	Bangor	Minesweeper	1957	1957-1958	10	Second-hand
	4	Gaspe	Minesweeper	1958	1958	4	Second-hand; Turkish designation Trabzon; financed by US 'MDAP' aid
	54	T-33A Shooting Star	Trainer aircraft	1967	1968-1973	54	Second-hand; T-33AN version
United States	30	F-104G Starfighter	FGA aircraft	1985	1986-1987	30	Second-hand; aid; CF-104G version; modernized in FRG before delivery; 20 more for spares only
	900	DHC-2 Beaver	Light aircraft	1948	1950-1964	900	US designation L-20 or U-6
	60	F-86F Sabre	Fighter aircraft	1951	1952	60	CL-13 Sabre-2 version
	285	T-6 Texan	Trainer aircraft	1951	1951-1954	285	T-6J version
	100*	T-34 Mentor	Trainer aircraft	1953	1954-1955	100	T-34A version
	50	DHC-3 Otter	Light transport aircraft	1955	1956-1960	50	US designation U-1A
	4	DHC-4 Caribou	Transport aircraft	1959	1959	4	For evaluation; US designation YAC-1
	159	DHC-4 Caribou	Transport aircraft	1960	1961-1964	159	US designation CV-2A/B
	4	DHC-5 Buffalo	Transport aircraft	1965	1965	4	For evaluation; plan for more cancelled; DHC-5A version; US designation AC-2/CV-7A
	134*	PT6	Turboprop	1967	1970-1975	134	For in PT6T (T400) version for 67 AH-1J combat helicopters produced in USA; probably from US production line
	22	F-101B Voodoo	Fighter aircraft	1970	1971	22	Second-hand; modified in USA to RF-101B reconnaissance aircraft
	2	PT6	Turboprop	1978	1979	2	For 2 PC-7 trainer aircraft from Switzerland; PT-6A-25A
	2	Piranha	APC	1981	1981	2	For evaluation; LAV-25 IFV version
	422*	Piranha	APC	1982	1983-1988	422	LAV-25 IFV version; incl production of components in USA
	4	Piranha	APC	1982	1984	2	Incl 1 LAV(C) CP, 1 LAV(R) ARV, 1 LAV(M) 81mm mortar carrier and 1 LAV(L) ALV version; incl for evaluation
	1	Piranha	APC	1982	1984	1	Incl for evaluation; LAV(AT) (LAV(M)) anti-tank version
	326*	Piranha	APC	1984	1985-1987	326	Incl 96 LAV(AT)/LAV(M) anti-tank, 50 LAV(C) command post, 46 LAV(R) ARV, 50 LAV(M) 81mm mortar carrier and 94 LAV(L) ALV version; incl production of components in USA
	2	Dash-8	Transport aircraft	1985	1988	2	Dash-8-100; modified in USA to E-9A missile range control aircraft; operated by civilian company for US air force
2	Piranha	APC	1985	1986	2	Fitted with US EW equipment; US designation MEWSS	
12	Piranha	APC	1987	1989	12	Fitted with EW equipment; US designation MEWSS	
5	APS-504(V)	MP aircraft radar	1990	1991	5	For 5 RC-12F MP aircraft produced in USA	

\* These purchases were not supplied, but licensed by Canada.

**Note:** The 'No. delivered/produced' and the 'Year(s) of deliveries' columns refer to all deliveries since the beginning of the contract. Deals in which the recipient was involved in the production of the weapon system are listed separately. The 'Comments' column includes publicly reported information on the value of the deal. Information on the sources and methods used in the collection of the data, and explanations of the conventions, abbreviations and acronyms, can be found at URL <[http://www.sipri.org/contents/armstrad/at\\_data.html](http://www.sipri.org/contents/armstrad/at_data.html)>. The SIPRI Arms Transfers Database is continuously updated as new information becomes available.

Table 2. Trade Register of Major Conventional Weapons, 1992-2013: Canada as Supplier

Recipient	No. ordered	Weapon Designation	Weapon Description	Year of Order/License	Year(s) of Deliveries	No. Delivered/Produced	Comments
Australia	64*	Piranha	APC	1992	1994-1996	64	Part of \$88 m 'Project Land-112 Phase-2' or 'ASLAV programme Phase-2'; most assembled from kits in Australia; incl 2 ambulance, 10 ARV, 9 CP and 10 radar reconnaissance version; Australian designation ASLAV-PC/R/A/S
	33*	Piranha/LAV-25	IFV	1992	1994-1996	33	Part of \$88 m 'Project Land-112 Phase-2' or 'ASLAV programme Phase-2'; most assembled from kits in Australia; Australian designation ASLAV-25
	14	Piranha/LAV-25	IFV	1996	1996	14	Project Land-112 Phase-2' or 'ASLAV programme Phase-2'; Australian designation ASLAV-25
	69*	Piranha	APC	1998	2002-2005	69	Part of \$180-210 m 'Project Land-112 Phase-3' or 'ASLAV programme Phase-3'; incl 7 ambulance, 11 ARV, 14 CP, 15 radar reconnaissance and 11 repair version; Australian designation ASLAV
	81*	Piranha/LAV-25	IFV	1998	2003-2005	81	Part of \$180-210 m 'Project Land-112 Phase-3' or 'ASLAV programme Phase-3'; Australian designation ASLAV-25
Botswana	13	F-5A Freedom Fighter	FGA aircraft	1996	1996-1997	13	Second-hand; \$50 m deal; CF-5A version; modernized before delivery to BF-5A version; incl 3 BF-5D version
	5	F-5A Freedom Fighter	FGA aircraft	1998	2000	5	Second-hand; CF-5A/B version; modernized before delivery to BF-5A/B version
	5	PT6	Turboprop	2011	2013	5	For 5 PC-7 trainer aircraft from Switzerland; PT-6A-25C version
Brazil	3	IRIS	AGS radar	1997	2002-2003	3	Part of 'SIVAM' air-surveillance network; for EMB-145RS (R-99B) AGS aircraft produced in Brazil
	8	Model-56 105mm	Towed gun	2000	2000	8	Second-hand
	99	PT6	Turboprop	2001	2001	99	For 99 EMB-314 (ALX or A-29/AT-29) trainer/combat aircraft produced in Brazil; PT-6A-68B version
	24	PW100	Turboprop/turboshaft	2005	2005	24	PW127 version for 12 C-295 transport aircraft from Spain
	6	Model-56 105mm	Towed gun	2006	2006	6	Second-hand
Colombia	14	PT6	Turboprop	1992	1992-1993	14	For 14 EMB-312 trainer aircraft from Brazil; PT-6A-25C version
	2	APS-504(V)	MP aircraft radar	2002	2003	2	For 2 CN-235 MP aircraft from Spain
	25	PT6	Turboprop	2005	2006-2008	25	For 25 EMB-314 (ALX) trainer/combat aircraft from Brazil; PT-6A-68A version
	8	PW100	Turboprop/turboshaft	2007	2008-2009	8	PW127 version for 4 C-295 transport aircraft from Spain
	1	APS-504(V)	MP aircraft radar	2009	2010	1	For 1 CN-235 MP aircraft from Spain; status uncertain
	2	PW100	Turboprop/turboshaft	2012	2013	2	PW127 version for 1 C-295 transport aircraft from Spain
	2	PW100	Turboprop/turboshaft	2013	2013	2	PW127 version for 1 C-295 transport aircraft from Spain
France	50	CL-289	UAV	1987	1990-1995	50	
	50	PT6	Turboprop	1991	1991	50	For 50 EMB-312 trainer aircraft from Brazil; PT-6A-25C version
Saudi Arabia	525	Piranha	APC	1990	1992-1993	525	LAV version; incl LAV-AT tank destroyer, LAV-90 (LAV-AG) AFSV and other versions
	987	Piranha	APC	1990	1994-2001	987	Part of \$700 m deal; ordered via USA; LAV version; incl 384 LAV-25 IFV, 71 ambulance, 18 ALV, 182 command post, 67 ARV, 34 AEV, 111 LAV-AT anti-tank and 73 AFSV version; for National Guard
	20	PT6	Turboprop	1994	1994	20	For 20 PC-9 trainer aircraft from Switzerland; PT-6A-62 version
	130	Piranha	APC	2000	2000-2004	130	Part of \$416 m deal; LAV-90 (LAV-AG) FSV version; ordered via USA as part of \$700 m deal for 1117 Piranha; for National Guard
	132	Piranha	APC	2006	2006-2009	132	Incl LAV-25 IFV and LAV-AG FSV version; for National Guard
	724	Piranha	APC	2009	2011-2014	620	\$2.2 b deal (part of \$5.8 b deal); sold via USA; LAV version; incl LAV-25 IFV, LAV-AG FSV, LAV-AT anti-tank, 120mm mortar carrier, ARV, command post and ambulance versions; for National Guard
	155	Piranha	APC	2011	2014	75	Incl 82 for National Guard; incl 17 APC, 28 anti-tank, 29 command post, 5 ARV, 3 ALV, 1 AEW, 6 mortar carrier and 6 ambulance version
	55	PT6	Turboprop	2012	2014	20	For 55 PC-21 trainer aircraft from Switzerland

Recipient	No. ordered	Weapon Designation	Weapon Description	Year of Order/License	Year(s) of Deliveries	No. Delivered/Produced	Comments
South Africa	60	PT6	Turboprop	1993	1994-1996	60	For 60 PC-7 trainer aircraft from Switzerland; PT-6A-25A version
South Korea	105	PT6	Turboprop	1995	2000-2007	105	For 85 KT-1 trainer and 20 KO-1 combat/reconnaissance aircraft produced in South Korea; PT-6A-62A version
Taiwan	27	APS-504(V)	MP aircraft radar	1986	1991-1993	27	For 27 S-2T ASW aircraft from USA
United Arab Emirates	10	DHC-6 Twin Otter	Transport aircraft	2008	2013-2014	6	\$65m deal; DHC-6-400 version; inc 4 Guardian-400 surveillance/MP version; bought and owned by UAE company incl for use by UAE government
	25	PT6	Turboprop	2009	2011-2012	25	For 25 PC-21 trainer aircraft from Switzerland
	24	PT6	Turboprop	2010	2010-2013	24	For 24 AT-802U combat aircraft from USA
	2	Global Express	Transport aircraft	2012	-	-	For modification to SIGINT aircraft
4	PT6	Turboprop	2012	-	-	For 2 P-180MPA MP aircraft from Italy	
United Kingdom	5	Global Express	Transport aircraft	1999	2007	5	Part of \$1.3 b deal (offsets 100%); for modification to Sentinel R-1 AGS aircraft in USA and UK with ASTOR radars from USA
United States	102	Bell-206/OH-58	Light helicopter	1993	1993-1995	102	\$85 m 'NTH' programme; for training; Bell-206B-3 or TH-206 version; US designation TH-67A Creek
	35	Bell-206/OH-58	Light helicopter	1994	1995	35	'NTH' programme; for training; Bell-206B-3 or TH-206 version; US designation TH-67A Creek
	12	Piranha	APC	1994	1995	12	Bison version
	17	Piranha	APC	1994	1997-1998	17	Chassis for LAV-AD AAV(G/M)
	4	Boeing-707	Transport aircraft	1995	1995	4	Second-hand; Boeing-707-347C version; \$6.8 m deal; modified in USA to E-8C J-STARS AEW&C aircraft
	741	PT6	Turboprop	1996	1999-2014	741	For 741 PC-9 (T-6A) trainer aircraft from Switzerland; PT-6A-62 version
	35	Bell-206/OH-58	Light helicopter	1999	2001-2003	35	'NTH' programme; for training; Bell-206B-3 or TH-206 version; US designation TH-67A Creek
	2131*	Piranha-3	APC	2000	2002-2007	2031	LAV-3 (LAV-25/Stryker) version; incl APC, command post, anti-tank, mortar carrier and MGS FSV versions
	704*	Piranha-3	APC	2005	2007-2009	704	LAV-3 (LAV-25/Stryker) version; incl APC, command post, anti-tank and mortar carrier versions
	615*	Piranha-3	APC	2008	2009-2011	615	\$1.2 b deal; LAV-3 (LAV-25/Stryker) version; incl APC, command post and mortar carrier versions
	352*	Piranha-3	APC	2009	2011-2012	352	\$647 m deal; LAV-3 (LAV-25/Stryker) version; incl APC, command post and mortar carrier versions
	3	Global Express	Transport aircraft	2009	2010-2011	3	Leased and later bought; modified in USA to communications support aircraft with BACN system; US designation E-11
	103*	Piranha-3	APC	2010	2012	103	\$176 m deal; LAV-3 (LAV-25/Stryker) version
	91*	Piranha-3	APC	2010	2011-2012	91	\$143 m deal; LAV-3 (LAV-25/Stryker) version
1	Global Express	Transport aircraft	2012	2012	1	\$45 m deal; modified in USA to communications support aircraft with BACN system; US designation E-11	
292*	Piranha-3	APC	2011	2012-2013	292	LAV-3 (LAV-25/Stryker SDVH) version	

\* These purchases were not supplied, but licensed by Canada.

**Note:** The 'No. delivered/produced' and the 'Year(s) of deliveries' columns refer to all deliveries since the beginning of the contract. Deals in which the recipient was involved in the production of the weapon system are listed separately. The 'Comments' column includes publicly reported information on the value of the deal. Information on the sources and methods used in the collection of the data, and explanations of the conventions, abbreviations and acronyms, can be found at URL <[http://www.sipri.org/contents/armstrad/at\\_data.html](http://www.sipri.org/contents/armstrad/at_data.html)>. The SIPRI Arms Transfers Database is continuously updated as new information becomes available.