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AN EXAMINATION OF UNITED STATES NAVY LEASING: Lessons from the MPS/T-5 Experience

By: Paul A. Haslam, Richard W. Koenig, and M. Scott Mitchell

December 2004
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This project analyzes the Navy's 1982 decision to lease thirteen T-AKX class Maritime Prepositioning Ships (MPS) and five Champion Class T-5 replacement tankers. It examines the MPS/T-5 history, a brief history of Navy ship leasing, and the MPS/T-5 acquisition process. In addition, it reviews the laws and regulations that were in place at the time of the lease and the cost comparison between the lease versus purchase decision. The examination concludes that while leasing the MPS/T-5 ships was more cost effective under 1982 laws and assumptions, many of these assumptions would no longer be used under current laws and regulations. Thus, from a purely monetary point of view, leasing would no longer be more cost effective than purchasing. However, leasing does provide three significant advantages that are not present in a traditional procurement. First, leasing allows the Government to pay as it uses an asset, which spreads the payments over an asset's useful life rather than completely paying for the asset when procured. Second, leasing allows the Government to bypass a lengthy procurement process, resulting in earlier asset utilization. Third, leasing allows the Government to obtain assets that would not have otherwise been procured due to budget constraints.

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Navy Leasing, Leasing, MPS, MPS Program, TAKX, TAKX Program, T-5, T-5 Program, Lease versus Purchase, Lease versus Buy, Tanker Leasing, T-5 Tanker Leasing, MPS Leasing, Ship Leasing.

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Paul A. Haslam, Lieutenant Commander, Supply Corps, United States Navy
Richard W. Koenig, Lieutenant Commander, United States Navy
M. Scott Mitchell, Lieutenant, United States Navy

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION
from the
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Lessons from the MPS/T-5 Experience

Abstract

This project analyzes the Navy’s 1982 decision to lease thirteen T-AKX class Maritime Prepositioning Ships (MPS) and five Champion Class T-5 replacement tankers. It examines the MPS/T-5 history, a brief history of Navy ship leasing, and the MPS/T-5 acquisition process. In addition, it reviews the laws and regulations that were in place at the time of the lease and the cost comparison between the lease versus purchase decision.

The examination concludes that while leasing the MPS/T-5 ships was more cost effective under 1982 laws and assumptions, many of these assumptions would no longer be used under current laws and regulations. Thus, from a purely monetary point of view, leasing would no longer be more cost effective than purchasing. However, leasing does provide three significant advantages that are not present in a traditional procurement.

First, leasing allows the Government to pay as it uses an asset, which spreads the payments over an asset’s useful life rather than completely paying for the asset when procured. Second, leasing allows the Government to bypass a lengthy procurement process, resulting in earlier asset utilization. Third, leasing allows the Government to obtain assets that would not have otherwise been procured due to budget constraints.
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I. INTRODUCTION

In 1936 Congress passed the Merchant Marine Act, which states:

It is necessary for the national defense and development of its foreign and domestic commerce that the United States shall have a merchant marine (a) sufficient to carry its domestic water-borne commerce . . ., (b) capable of serving as a naval and military auxiliary in time of war or national emergency . . ., (d) composed of the best-equipped, safest, and most suitable types of vessels . . ., and (e) supplemented by efficient facilities for shipbuilding and ship repair.1

While the Merchant Marine Act of 1936 does not spell out in detail how to fulfill these requirements, the fuel tanker program and the Maritime Prepositioning Ship (MPS) program, both run by Military Sealift Command (MSC), are examples that fulfill these requirements. In addition, MSC’s mission “to provide ocean transportation of equipment, fuel, supplies and ammunition to sustain US forces worldwide during peacetime and in war. . .”2 also supports the mission-essential need for fuel tankers and prepositioned ships.

Thus, in the early 1980s the Navy needed several MPS and fuel tanker ships. The requirement for MPS vessels was driven largely by the MPS (a.k.a. TAKX) Program, which had been authorized by the Secretary of Defense in August 1979. The purpose of this Program was to increase the US military’s rapid response capability to crisis situations by pre-staging equipment and supplies on ships positioned strategically around the world.

The actual requirement for the MPS Program was sufficient ship capacity for equipment and supplies to sustain three Marine Expeditionary Brigades ashore for 30 days of combat. This need resulted in Naval Sea Systems Command’s (NAVSEA) October 14, 1981, Request for Proposal (RFP) Number N00024-82-R-2051: TAKX


Maritime Prepositioning Ships. This RFP sought either a lease or purchase of what would later become 13 maritime prepositioning ships.

At the same time, the Navy faced an aging fleet of T-5 fuel tankers, many of which were World War II (WWII)-vintage. Fuel tankers were required by the Navy to transport fuel to vital locations around the world for use during peacetime and times of conflict. During WWII, the Navy leased a variety of tanker ships to meet its fuel transportation requirements and, following the war, maintained and operated numerous tankers.

In June 1972, the Navy entered into a lease agreement for the charter of nine T-2 replacement tankers to replace 14 WWII-vintage T-2 tankers. The T-2 tankers were originally planned to be built with appropriated funds; however, when acquisition proved infeasible due to budgetary constraints, the Department of Defense (DoD) opted to enter into a long-term lease. Thus, the requirement to replace five of the WWII-vintage T-5 tankers was expected, and on January 11, 1982, Military Sealift Command (MSC) issued RFP Number N00033-82-R-7002 for the charter of five T-5 replacement tankers.

A. RESEARCH QUESTIONS

While many questions could be answered in this project, our research focuses on three main areas: the reasoning behind the MPS/T-5 lease agreements, the factors involved in the Deal and the lessons learned from the MPS/T-5 experience. These issues will be addressed by answering the following questions:

1) Why did the Navy decide to lease versus purchase (LvP) the 18 MPS/T-5 vessels?
2) How was the Deal structured?

3 The terms ‘lease’ and ‘charter’ are synonymous and are used interchangeably.

4 As of September 30, 2003, 27 tankers were under the control of either MSC or the MARAD (Maritime Administration). See Figure 1.


6 The 13 MPS and five T-5 vessels that make up the 1982 MPS/T-5 lease agreements will be referred to as the “Deal” throughout the remainder of this paper.
3) Was leasing more cost effective than purchasing?

4) What special legislation and special administrative provisions were necessary to obtain Congressional approval of the Deal?

5) What was Argent Group Ltd.’s role?

6) What legislation, tax, and regulatory changes have occurred since 1984, which would impact the perceived attractiveness of the Deal today?

7) What conclusions have been derived with regard to the feasibility of a LvP decision in a 2004 environment?

B. RESEARCH METHODS

Argent Group Ltd. (AGL) provided the majority of the information used for this project. Data were collected from AGL’s historical files. These files consisted of Congressional reports; internal and external AGL-drafted documents; various media documentation, such as newspaper, journal and magazine articles; and personal correspondence between AGL, MSC contractors, banking institutions, and Congress.

To develop the background of the MPS/T-5 experience, basic interviews were conducted with AGL’s managing directors, the MSC MPS Project Officer, MSC’s Executive Assistant for Business Operations, and senior military members who were involved in the Deal’s original negotiations and contract awards. The interviews added to the overall understanding of the MPS/T-5 experience and the information obtained from them has been verified by the aforementioned documentation.

Office of Management and Budget (OMB) Circular A-11 and A-94 for 1980 and 2004 provided information regarding leasing rules and regulations. The purpose of using the 1980 and 2004 editions of the OMB circular A-11 and A-94 was to compare and contrast leasing changes since the Deal’s inception.

Technical specifics of the 18 ships were retrieved from interviews with MSC, the MSC website, the original MPS/T-5 RFPs and various technical manuals.
C. ORGANIZATION OF THE REMAINING CHAPTERS

The history of the MPS/T-5 tankers will be examined in Chapter II, including the ship’s key historical events, as well as a complete chronology of events from the time the MPS/T-5 vessels were authorized until present. In addition, AGL, a specialized investment-banking firm hired by the Navy to be its financial advisor, and its involvement in the Deal will be discussed.

Chapter III will provide a comprehensive evaluation of the Deal and an extensive discussion of the Deal’s structure and key players. We will examine the cost effectiveness of leasing compared to procurement, and discuss special legislation that would be necessary to ensure viability of future ship leasing projects. Ship operation will also be discussed, and the capital hire component of the leases will be reviewed in detail. Finally, the Navy’s decision to purchase four of the five T-5 tankers in January 2003, several years before the expiration of their leases, will be evaluated.

In Chapter IV, we will present a survey of the legislative, tax, and regulatory issues and discuss its impact on the Deal and future leasing feasibility. Specifically, we will discuss what governing changes originated from the decision to lease the MPS/T-5 vessels. We will discuss, in retrospect, the geopolitical and financial successes of the past twenty years that were influenced by the operational capability of the ships acquired in the Deal.

In Chapter V, we will present leasing recommendations—specifically, when the Government should lease and when it should purchase, and the required legislation that would make leasing more viable in 2005. We will also offer a net total cost to the Government (NTCG) tax implication analysis based on AGL, the Joint Committee on Taxation, and our own analyses. Finally, we will conclude our study with a project summary and provide direction for future research.
II. HISTORY OF THE MARITIME PREPOSITIONING SHIPS AND T-5 TANKERS

A. MARITIME PREPOSITIONING SHIPS AND T-5 TANKERS

During the Cold War era of the 1980s the US was still highly involved in a massive armed forces build-up. Part of this increase was President Ronald Reagan’s concept of a “600-ship Navy”\(^7\): a Navy effort to regain its post-Vietnam-era size to deal with the Soviet threat. As a result of this effort, additional money was spent on the procurement of high-priority combat ships, which included the MPS/T-5 Program.

After the MPS/T-5 RFP solicitation, AGL, the Navy’s financial advisor, recommended that the Navy divide the RFP into different sections due to the proposals’ magnitude and complexity. It was during the RFP analysis that the decision to charter the ships was deemed the best option. Under 1982 laws and regulations, the cost of leasing the MPS/T-5 vessels was determined to be lower than the cost of purchasing them. Furthermore, Congress authorized the procurement of the ships even though the money had not yet been appropriated. Because the payments were spread over the ship’s life, current fiscal year procurement money could be used on high-priority combat ships.

B. CHRONOLOGICAL EVENTS: 1979 – PRESENT

A MPS/T-5 chronology of events from conception to present day follows. This chronology is purposely abbreviated to provide the reader a brief overview. A detailed analysis of some of these events will be forthcoming in Chapter III.

- 1979 August – Secretary of Defense authorized the Maritime Prepositioning Ship (a.k.a. TAKX) Program, which was specifically intended to increase the US’s ability to rapidly respond to crisis situations using a credible force.

---

• 1980 September – Congress authorized the TAKX ships.

• 1981 October – NAVSEA issued RFP Number N00024-82-R-2051, requesting proposals to either charter or purchase 12 to 15 TAKX Maritime Prepositioning Ships.

• 1981 December – Office of Secretary of Defense (OSD) and Secretary of the Navy (SECNAV) approved the use of a charter rather than a purchase.

• 1982 January – MSC issued RFP Number N00033-82-R-7002, requesting proposals to charter five T-5 replacement tankers.

• 1982 January – Technical offers received from ten offerors under the TAKX RFP.

• 1982 March – TAKX RFP price proposals received by NAVSEA.

• 1982 May – Initial offers received from nine offerors under the T-5 tanker RFP.

• 1982 August – Conditional TAKX awards made to Maersk (3 ships firm + 2 option), Waterman (1 ship firm + 2 option), General Dynamics (2 ships firm + 3 option).

• 1982 September – Congressional oversight committees approved TAKX awards.

• 1982 September – Conditional award made to Ocean Carriers (a.k.a. Shipholdings) (2 tankers firm + 3 option).
• 1982 October – Option exercised for 2nd Waterman TAKX.

• 1983 January – Options exercised for 4th and 5th Maersk, 3rd - 5th General Dynamics, and 3rd Waterman TAKX.

• 1983 April – Options exercised for 3rd - 5th T-5 tankers.

• 1984 September – Maersk # 1 TAKX ship delivered: CPL Louis Hauge, Jr.

• 1984 October – Waterman # 1 TAKX ship delivered: SGT Matej Kocak.

• 1984 October – Maersk # 2 TAKX ship delivered: PFC William B. Baugh.


• 1985 February – General Dynamics # 1 TAKX ship delivered: 2nd LT John P. Bobo.

• 1985 March – Maersk # 3 TAKX ship delivered: PFC James Anderson, Jr.

• 1985 May – Waterman # 3 TAKX ship delivered: Major Stephen W. Pless.

• 1985 June – Shipholdings # 1 T-5 tanker delivered: Paul Buck.

• 1985 June – General Dynamics # 2 TAKX ship delivered: PFC Dewayne T. Williams.

• 1985 September – Shipholdings # 2 T-5 tanker delivered: Gus W. Darnell.
• 1985 September – Maersk # 5 TAKX ship delivered: PVT Harry Fisher, later renamed the PVT Franklin J. Philips.

• 1985 September – Maersk # 4 TAKX ship delivered: 1st LT Alex Bonnyman.

• 1985 November – Shipholding # 3 T-5 tanker delivered: Samuel L. Cobb.

• 1985 November – General Dynamics # 3 TAKX ship delivered: 1st LT Bloomer Lopez.

• 1986 February – Shipholding # 4 T-5 tanker delivered: Richard G. Matthiesen.

• 1986 March – General Dynamics # 4 TAKX ship delivered: 1st LT Jack Hummus.

• 1986 April – Shipholding # 5 T-5 tanker delivered: Lawrence H. Gianella.


• 2003 January – MSC exercised option to buy Shipholdings # 1 T-5 tanker, Paul Buck, 28 months before lease option expired.

• 2003 January – MSC exercised option to buy Shipholding # 3 T-5 tanker, Samuel L. Cobb, 33 months before lease option expired.
• 2003 January – MSC exercised option to buy Shipholding # 4 T-5 tanker, Richard G. Matthiesen, 36 months before lease option expired.

• 2003 January – Military Sealift Command exercised option to buy Shipholding # 5 T-5 tanker, Lawrence H. Gianella, 38 months before lease option expired.

• 2003 January – Military Sealift Command unable to negotiate an equitable price for Shipholdings # 2 T-5 tanker, Gus W. Darnell.

• 2005 August – Lease option scheduled to expire on Shipholdings # 2 T-5 tanker, Gus W. Darnell.

C. OPERATIONAL HISTORY

1. 1982 MPS/T-5 Tanker Lease Versus Purchase Option

The decision of whether it was more advantageous for the Navy to lease rather than purchase the 18 ships in the MPS/T-5 tanker deal in 1982 can be viewed from many angles. One angle focuses on whether the ship’s operating cost under a lease agreement was a greater economic advantage to the Government over an outright vessel purchase and operation.

To present a complete analysis of whether the decision to lease the vessels was an appropriate one, it is necessary to understand the ship’s history and purpose within a MSC operational context.

2. Military Sealift Command

MSC’s mission is to provide ocean transportation for the DoD, and it is specifically responsible for providing strategic sealift and ocean transportation for all military forces overseas.

MSC is under the command of the United States Navy and makes up one of the three component commands of the United States Transportation Command (TRANSCOM). The other two component commands of TRANSCOM are the Air
Mobility Command (AMC), commanded by the United States Air Force, and the Defense Military Surface Deployment and Distribution Command (SDDC), commanded by the United States Army.

MSC is headquartered at the Washington Navy Yard in Washington, D.C., and has five Area Commands around the world: Sealift Logistics Command Atlantic, MSC Central, MSC Europe, MSC Far East, and MSC Pacific. MSC operates through four programs to conduct its mission: 1) Naval Fleet Auxiliary Force (NFAF), 2) Special Mission, 3) Prepositioning, and 4) Sealift.8

The NFAF acts as the Navy’s lifeline-at-sea. It performs at-sea replenishment operations with Navy ships, and some NFAF ships conduct towing and salvage operations and act as floating medical facilities. The Special Mission ships carry out diverse assignments for DoD sponsors and perform such duties as oceanographic surveys, submarine support, missile test ships, undersea cable laying and high-speed transportation. The Prepositioning Program provides vessels to forward staging areas throughout the world to support DoD combat operations in a relatively rapid response mode. The Sealift Program is designed to meet all DoD sealift requirements in times of peace and war. The Sealift Program itself is composed of three operations: Tankers, Dry-Cargo, and Surge Sealift. Several Ready Reserve Force (RRF) ships are under the cognizance of the Maritime Administration, a component of the Department of Transportation, but which may come under MSC control in times of war or other contingencies. These RRF ships may be used, as applicable, in any of the four MSC programs.

The 18 vessels acquired by MSC in the Deal are used to support the Prepositioning Program and the Tanker arm of the Sealift Program.

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Figure 1 depicts the MSC-controlled fleet as of September 30, 2003. The 13 MPS vessels are depicted in the lower portion of the “Prepositioning” column, and the five T-5 Champion-class tankers are depicted in the upper portion of the ‘Sealift’ column. As of September 30, 2003, the Government purchased four of the five tankers. The remaining ship, MV Gus Darnell (T-AOT 1121), still operates under its long-term charter, which expires August 2005.

3. Prepositioning Program

The Prepositioning Program consists of cargo ships forward deployed throughout the world. It is comprised of the Combat Preposition Force (CPF), which carries

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equipment for Army operations; the Maritime Preposition Force (MPF), which carries equipment for United States Marine Corps (USMC) operations; and the Logistics Preposition Force (LPF), which carries equipment for the Navy, Air Force, and Defense Logistics Agency (DLA). The 13 containerized and roll-on/roll-off (RO/RO) ships acquired in the Deal agreement are used by the MPF.

The MPF ships are located throughout the world in three geographically strategic areas as depicted in Figure 2. The MPF is made up of three Maritime Preposition Squadrons (MPSRON). MPSRON-1 is located in the Mediterranean Sea, MPSRON-2 in Diego Garcia in the Indian Ocean, and MPSRON-3 in Guam/Saipan in the Western Pacific Ocean.

![Figure 2. Maritime Preposition Squadron’s Strategic Homeports](http://www.hqmc.usmc.mil/ilweb.nsf/o/1d821ba07d692a07852569d20040d9b6/$FILE/Blount+Island.pdf (accessed 16 October 2004).)

The importance of MPSRON positioning can be seen in Table 1, which depicts the estimated transit times from MPSRON homeports to some of the world’s potential crisis areas.

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10 Headquarters Marine Corps, “National Strategic Asset, Blount Island, FL – The case for DoD Acquisition – May 2003”
Table 1. MPSRON Transit Times\textsuperscript{11}

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>MPS-1</th>
<th>MPS-2</th>
<th>MPS-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persian Gulf</td>
<td>11 Days</td>
<td>1-7 Days</td>
<td>16 Days</td>
</tr>
<tr>
<td>Korean Peninsula</td>
<td>21 Days</td>
<td>13 Days</td>
<td>4 Days</td>
</tr>
<tr>
<td>Mediterranean Sea</td>
<td>2 Days</td>
<td>13 Days</td>
<td>22 Days</td>
</tr>
</tbody>
</table>

Of the 16 ships in the MPF, 13 were acquired in the Deal. These ships are listed in Appendix A, along with the squadron to which they are currently assigned.

As previously mentioned, the ships of the MPF are designed to support USMC operations. Normally, the ships will rest at anchor along with other ships in the squadron at the squadron’s homeport. They are required to conduct exercises annually, where all ships in the squadron get underway and sail in the vicinity of their homeport for two to four weeks. In addition to the required sortie exercise, they may also participate in other regional exercises in support of USMC operations. One such annual exercise is Exercise Cobra Gold, which the US conducts with the Thai military. Figure 3 depicts the MV 1\textsuperscript{st} Lt. Baldomero Lopez (of MPSRON-2) off-loading USMC equipment via onboard cranes during Exercise Cobra Gold 2002.

\textsuperscript{11} Webbers, Rudolf (MAJ), Headquarters Marine Corps Prepositioning Handbook. 2004, 30.
The MPS vessels excel in their offload capabilities, especially in the use of ramps to deliver vehicles under their RO/RO capacity. Figure 4 shows a picture of the SS PFC Eugene A. Obregon (of MPSRON-1) delivering vehicles to USMC forces in Thessalonika, Greece, during Exercise Dynamic Mix 2000, a military exercise held with Greek forces.


Aside from normal operations and annual exercises, MPS vessels have proven their worth to US national defense over the last 20 years, and they continue to do so today. Originally, the concept of prepositioning was implemented through the Near-Term Prepositioning Ship (NTPS) Program in the late 1970s. This program was a direct response to the world’s political situation at that time. The Iranian Hostage Crisis, the Soviet Union’s invasion of Afghanistan, and the domestic uproar over two oil crises within the previous six years concerned the Government. The US needed to establish a rapid response capability for its military forces, especially in the Persian Gulf region. The five ships of the NTPS Program consisted of two RO/RO ships and three break-bulk ships stationed in Diego Garcia. The acquisition of the 13 MPS vessels in the Deal enabled the US to greatly expand its prepositioning capabilities. The NTPS Program was eventually replaced by the MPS Program, and, as previously explained, expanded to three squadrons capable of extending its scope globally.

Operation Desert Shield/Desert Storm in 1990-91 was the first test for the MPS Program. All three squadrons were employed in this successful effort, which validated the decade-old MPF Program. Following that conflict, MPS vessels were involved in Operation Fiery Vigil, the support of US forces and the Philippine people during the eruption and aftermath of Mount Pinatubo in 1991, and in Operation Restore Hope in 1993, where the vessels supported USMC forces deployed to Somalia. Other assists during the 1990s included relief operations for typhoon victims in South Asia.

Upon entering its third decade, the vessels were again called to assist the Global War on Terrorism (GWOT). For three years it has lent support to Operation Enduring Freedom (OEF) in Afghanistan, and, more recently in January 2003, 11 of the 15 MPS vessels were offloaded in support of Operation Iraqi Freedom (OIF). From a historical and operational standpoint, the MPS vessels’ availability during the waning years of the Cold War proved highly beneficial. Were it not for the ability to acquire these ships under a long-term lease agreement, the opportunity to operate them at critical times in US History might not have been possible as the funds used to lease these ships would have likely been disbursed to other ship programs.
4. Tanker Program

The five T-5 tankers acquired in the Deal were not used in conjunction with the Maritime Prepositioning Ships but were instead used for a variety of purposes in the Sealift Program. Annually, tankers of the Sealift Program (currently six long-term contract tankers and 38 voyage and short-term time-chartered vessels) deliver approximately 1.5 billion gallons of petroleum products (in 150 to 250 voyages) to DoD storage and distribution facilities around the globe. These petroleum products consist of Navy jet fuel, marine diesel fuel (for Navy and NFAF ships), and kerosene-based jet fuel (for Army ground forces and Air Force aircraft). In addition, they can deliver standard turbine fuel as necessary to US territories in the Pacific and to distant military bases such as Guantanamo Bay, Cuba, the Aleutian Islands, and Diego Garcia in the Indian Ocean. Recently, much of this re-fueling support was provided to coalition forces operating in OEF and OIF.

Of the five ships contracted under the Deal, two have the capability to pump petroleum from piers up to three miles away from the receiving facility by employing special equipment unique to these ships. In addition, all T-5 tankers were designed with ice-strengthened double-hulls. This hull structure enables these ships to conduct unique annual missions such as re-fueling the National Science Foundation’s McMurdo Station in Antarctica during Operation Deep Freeze (depicted in Figure 5), and the re-fueling of the US Air Force’s Thule Air Base in Greenland during Operation Pacer Goose (depicted in Figure 6).
Figure 5. USNS (then MV) Lawrence H Gianella (T-AOT 1125) Re-fueling McMurdo Station in Antarctica during Operation Deep Freeze 2001\textsuperscript{14}

Figure 6. USNS Paul Buck (T-AOT 1122) (center) Supporting Operation Pacer Goose 2003\textsuperscript{15}

The T-5 tankers routinely refuel NFAF oilers, as depicted in Figure 7. These oilers, in turn, refuel underway navy combatants. Although a capability not routinely employed, two T-5 tankers have modular fuel delivery systems that allow them to participate in underway replenishment exercises due to their ability to re-fuel naval combatants and NFAF ships.


D. ARGENT GROUP LTD.

The RFPs issued in 1982 for the MPS/T-5 vessels constituted the largest single private-sector US ship financing program undertaken by the Navy, representing over $2.65 billion. While both the MPS and T-5 tanker solicitations were issued separately, MSC pre-determined a need for assistance in evaluating the numerous offers submitted in response to both RFPs. On February 22, 1982, MSC issued RFP Number N00033-82-R-0532, requesting a proposal for 2,000 hours of financial advisory services to effectively evaluate the financial aspects of all MPS/T-5 RFP submissions.

Evan-Proctor Associates, Inc, which was renamed Argent Group Ltd. in early 1982, was one of four companies that submitted financial service proposals. MSC’s contracting and counsel staff considered each Offeror based on technical experience,
management experience and cost. AGL was eventually awarded the contract on April 5, 1982, based on its superior expertise in leveraged lease\textsuperscript{17} transactions.

At the time, AGL was a specialized investment-banking firm that had substantial experience in structuring and implementing large-scale financing transactions. Due to the scope and complexity of the $2.65 billion MPS/T-5 Deal, the Navy needed a financial advisor with leasing industry knowledge to guide it through the process. Argent provided that guidance by conceiving, structuring and implementing financing packages for both the ship construction and post-delivery periods. In addition, AGL served as the Navy’s exclusive financial advisor, obtaining financing, reviewing all offers, and serving as an information conduit between Congress, the Navy, and various contractors.

AGL’s 2,000-hour contract was extended several times, and, ultimately, became a reimbursable cost contract. Argent continues under contract aiding the Navy with additional work concerning the MPS/T-5 Program.

\textsuperscript{17} A leveraged lease is “A lease in which the lessor/owner purchases the equipment by making a specified equity investment and finances the remaining balance through a long term lender (or lenders). To be considered a leveraged lease, the financing provided by the lender must be substantial to the transaction, and be provided without recourse to the lessor.” Referenced from Leasing Ideas.com. “Leveraged Lease.” http://www.leasingideas.com/main/terms.html (accessed 8 November 2004).
III. COMPREHENSIVE EVALUATION OF MPS/T-5 TANKER DEAL

A. STRUCTURE OF THE DEAL

The Deal consisted of 13 MPS and five T-5 tankers. Although each ship had a separate contract, the structure of each was the same; all were implemented together. Next, we will discuss the Deal’s key players, describe its structure as a whole and highlight any contractual differences where appropriate.

The Deal consisted of five principal participants (whether the vessels were in the construction or post-delivery period determined their degree of involvement). The information below summarizes, in general, each participant and its role in the Deal.

- **Lessor**: A collection of commercial banks and finance companies that provided, through a trust arrangement, approximately 30 percent of the vessel’s cost. These investors were also known as Owner-Participants. Although they “owned” the vessels, they were passive owners because they did not have an active role in the ship’s management. They invested their money with the expectation of a return on their investment through collection of lease payments and several tax benefits, including accelerated depreciation. The Federal Financing Bank (FFB), a wholly owned corporation of the United States that provides loans to Federal agencies and non-Federal borrowers whose transactions are protected by Federal guarantees, provided the vessel’s remaining 70 percent financing cost. The FFB represents the lowest financing cost available, lending at a pre-tax rate of one-eighth of one percent over the applicable Treasury rate.

- **Shipyard**: Responsible for the vessel’s construction. Each shipyard used current commercial specifications, known as American Bureau of Shipping Standards (ABS), to build each vessel and ensured the Navy’s operational and technical requirements were met.

- **Contractor**: A special purpose entity established by the Offeror (General Dynamics Corporation, Maersk Line, Limited, or Waterman Steamship Corporation) who was responsible for contracting with the shipyard for vessel construction or conversion,
as applicable, and to enter into a supervisory construction and operating agreement with the company who would operate the vessel upon its completion.

- **Operator**: Supervises the vessel during construction and operates it following construction. A supervisory fee is paid for the former and an operating hire payment paid for the latter. The Contractor makes both payments to the Operator.

- **Navy**: Signs a contract with the Contractor for the build and charter of each vessel and pays nothing during vessel construction. Upon delivery and the Navy’s subsequent acceptance, the Navy pays a semi-annual charter hire payment to the Contractor until the contract’s termination. Capital hire payments are made on a “hell or high water” basis, meaning that the Navy unconditionally guarantees its capital hire payment obligations as defined in the contract.

Table 2 describes how the Deal was structured and Figures 8 and 9 provide a graphical representation of the Deal both during construction and post-delivery, respectively.
<table>
<thead>
<tr>
<th>Awardee</th>
<th>Award</th>
<th>Advisor(s)</th>
<th>Shipyard</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Dynamics Corp.</td>
<td>5 TAKX</td>
<td>Salomon Brothers, Inc.</td>
<td>General Dynamics Corp.</td>
</tr>
<tr>
<td>Maersk Line, Limited</td>
<td>5 TAKX</td>
<td>Morgan Guaranty Trust Co. of NY</td>
<td>Bethlehem Steel Corp.</td>
</tr>
<tr>
<td>Waterman Steamship Corp.</td>
<td>3 TAKX</td>
<td>Citibank, N.A. and Manufacturers Hanover Leasing Corporation, acting jointly</td>
<td>National Steel and Shipbuilding Co.</td>
</tr>
<tr>
<td>Ocean Shipbuildings, Inc.</td>
<td>5 T-5</td>
<td>Shearson Leasing Corp.</td>
<td>The American Shipbuilding Co.</td>
</tr>
</tbody>
</table>

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18 Author’s recreation of information obtained from Solomon Brothers, Inc. See Solomon Brothers, Inc. Equity Participations in the Leveraged Lease Financing of Eighteen Vessels Estimated Aggregate Cost of $2,650,000 to be Time Chartered to The United States of America Acting through the Department of the Navy Military Sealift Command. 5 December 1983, 3.
Figure 8. Structure during Construction\textsuperscript{19}

Figure 9. Post-Delivery Structure\textsuperscript{20}

\textsuperscript{19} Key Considerations Regarding A Charter and Build Program for Auxiliary Dry Cargo Carriers. Argent Group Ltd. November 1997, 6.

\textsuperscript{20} Ibid, 7.
The Deal’s overall structure consisted of four main parts: construction, financing, delivery and time charter arrangements. Each part is summarized below:

- **Construction:**
  - Contractor negotiated a fixed-price construction contract with the shipyard and provided progress payments during construction.
  - Contractor arranged for interim loans to finance the construction. The Contractor assumed all risk associated with the loans until an acceptable vessel was delivered to the Navy.
  - Contractor was responsible for supervising the construction to ensure the vessel was completed according to the specifications and plans submitted by the Offeror (who included the Navy’s operational and technical requirements in its specifications and plans to the Contractor). As discussed earlier, the Contractor paid a supervisory fee to the Operator to supervise vessel construction.
  - The Navy retained the right to inspect the construction, but it could not deal directly with the shipyard, nor did it have any supervisory obligations, unilateral design change rights or liability to the Shipyard in the event of cost overruns.

- **Financing:**
  - Prior to delivery, the Contractor arranged permanent financing for the vessel, consisting of equity from private investors and debt from the FFB.
  - The private investors (a.k.a “Equity Participants”) invested approximately 30 percent of the vessel’s cost and, through the Owner-Trustee, assumed ownership of the vessel on or before the vessel’s delivery date. As such, they were eligible, under then current legislation, to receive certain tax benefits (e.g., accelerated depreciation) associated with ownership.

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22 Although the information for this section originates from Argent Group, Ltd.’s T-5 Tanker Replacement Supplemental Report, the Deal structure for both the T-5 tankers and the TAKX ships are, in general, equivalent.
The debt was issued by the Owner-Trustee in the form of long-term (20.25-year) bonds purchased by the FFB. All debt funds flowed directly to the FFB, which held a mortgage on the vessel to secure the debt.

• **Delivery:**
  - When the vessel was completed, it was delivered to the Owner-Trustee, who simultaneously delivered it to the Contractor under a Bareboat Charter. The proceeds of the debt and equity financing were used to pay off the interim construction loans.
  - The Bareboat Charterer (Amsea, Maersk, Waterman, or Ocean Carriers, as applicable) began operating the vessel for the Contractor under the operating contract. The vessel was chartered to the Navy under the Time Charter provisions. Upon delivery, the fixed costs of the vessel were adjusted to reflect actual interest rates paid during construction on the interim construction loans.

• **Time Charter:**
  - The Navy began its charter hire payments (which are made up of both the capital hire and operating hire payments) upon delivery and acceptance of each vessel.
  - The capital hire payment was made on a “hell or high water” basis. Upon delivery, the capital hire rates were adjusted to reflect the actual debt and equity financing rates. Subsequently, the debt rates were fixed, giving rise to an adjustment in the capital hire rates. Once the rates were adjusted, the Navy’s capital hire rates were fixed for the entire charter period. Rent paid to the Owner-Trustee under the Bareboat Charter corresponded to the capital hire paid under the Time Charter.

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23 A bareboat charter is an arrangement where ownership of a vessel is provided to the chartering entity, which may, at its discretion, operate the vessel itself or charter it to another entity.

24 A time charter is an arrangement where the owners of a vessel charter the use of its vessel to another entity.
The terms for the Time Charters are as follows: MPS – five year contract with four renewal periods (total of 25 years); T-5 – five year contract with three renewal period (total of 20 years). If the Navy fails to exercise a renewal option or terminates for convenience after the initial period, the vessel will be sold and the Navy must pay the difference between the selling price and the pre-determined termination value (see Appendix C for Maersk Vessel Number Three and Shipholdings Vessel Number Three termination values). The termination value is designed to repay the debt and equity participants for the return of and return on their investment. However, the Navy may, at its option, purchase the vessels at the higher of termination or market value.

The operating hire component is paid to the Bareboat Charterer (i.e., Contractor) for the vessel’s operation. It includes operating expenses and a profit factor as agreed to in the Offer. The Contractor assumes the risk for all off-hire provisions and ship non-performance. The Time Charter also contains economic inflation provisions to compensate the Bareboat Charterer for increases in crew wages, stores and subsistence, maintenance and insurance. Provisions for loss of the vessel are also included.

B. COST EFFECTIVENESS AND CONTROVERSY OF LEASING

The controversy surrounding the decision to lease versus purchase (LvP) thirteen MPS and five T-5 tankers is rich in discussion and content. In this section, we will walk the reader through the Navy’s leasing history up to its 1982 decision to charter and build the MPS and T-5 tankers. Specifically, we will highlight the 1972 controversy regarding the build and charter of nine Sealift tankers; identify the timeline of the 1982-83 charter and build program, including key players and their role in the LvP analysis; and, finally, we will summarize, in a net present value (NPV) context, the three major LvP issues the Deal created.

1. History

The Navy has a long-standing leasing history dating back to World War I. Supporting this history is the Merchant Marine Act of 1936, a Congressional mandate to create a United States merchant marine force that would be utilized to operate vessels and
transport items as directed by the Federal Government.25 Everett Pyatt, Principal Deputy Assistant Secretary of the Navy (Shipbuilding and Logistics), in his February 28, 1983, statement regarding the TAXK Program before the Subcommittee on Oversight of the House Ways and Means Committee, summarized the Navy’s leasing history and its relationship with the Merchant Marines as follows:

The chartering of merchant ships by Government agencies is not a new concept. During World Wars I and II, the predecessors of the Maritime Administration engaged in a large-scale chartering of US merchant ships for the carriage of vital war materials and supplies. The Navy, during World War II, chartered over 450 merchant ships for the same purpose. At the outbreak of the Korean War, the Navy had only six merchant ships under charter. Within 90 days, that number had increased to 216. Similarly, at the height of the war in Viet Nam, the Navy had over 200 ships under charter. Today [in 1983], the Navy’s Military Sealift Command continues to charter merchant ships, [sic] for periods ranging from the length of a single voyage to five years. …Since the early 1950’s, the Navy has, with the foreknowledge and approval of Congress, used the build and charter [leasing] method to obtain the services of one cargo ship and 29 tankers. This concept has proven valuable and a proper reliance on the merchant marine to furnish goods and services needed by the Navy.26

On June 20, 1972, the Navy entered into a build and charter agreement for nine Sealift tankers. Considering the Navy’s past leasing success, this deal was not unusual. Originally, the tankers were to be built using appropriated procurement funds, but budgetary constraints during that period prevented the Navy from pursuing this option. Thus, the Navy chose to enter into a 20-year long-term lease.27

Disagreement, however, existed between the DoD and Congress (particularly, the Government Accounting Office (GAO)) regarding the leasing arrangement’s tax treatment and the discount rate selection used in the LvP analysis, which subsequently led

25 Maritime Administration. 1 USC. 101 (46 App. USC. 1101 (2002)).

26 Everett Pyatt. Statement before the Subcommittee on Oversight of the House Ways and Means Committee on the Navy’s TAKX Program. 28 February 1983.

to different conclusions. Table 3 highlights the differences and conclusions between the GAO and DoD.28

Table 3. Differences Between the GAO and DoD Regarding the 1972 Charter and Build Program for Nine Tanker Ships

<table>
<thead>
<tr>
<th>GAO</th>
<th>Controversy</th>
<th>DoD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Owner-Participants bought tax breaks because they deferred their taxes to the latter portion of the 20-year contract. A taxpayer in the 46% tax bracket, for example, would receive $0.46 in tax-free money for every dollar, which the investor would, presumably, reinvest. Federal tax revenue that was “lost” to the investor in the form of accelerated depreciation would be counted as a cost of leasing. Owner-Participants furnished 25% of the total investment capital. Bondholders contributed the remaining 75%.</td>
<td>Tax Treatment</td>
<td>Tax incentives such as the investment tax credit and accelerated depreciation are designed to promote long-term economic benefits for the economy and, thus, would not be considered a loss of Government revenue. Same 3-to-1 Bondholder debt/Owner-Participant equity ratio applied.</td>
</tr>
<tr>
<td>Used 6% based on the average yield on 20-year Treasury bonds.</td>
<td>Discount Rate</td>
<td>Used 10% based on DoD Instruction 7041.3 (DoD Cost Comparison Handbook), which was also stipulated in OMB Circular A-94. The OMB rate (10%) was an estimate of the</td>
</tr>
</tbody>
</table>

average return for private investment before taxes and after inflation. In the absence of any other analyses stating what the discount rate should be, DoD chose 10%. The GAO’s use of 6%, according to the DoD, was a matter of opinion.

| Used 15% based on the estimate provided to the IRS. | Residual Value | Used 5% as the “normal” value of MSC ships when held until retirement. |
| Used 5% as the “normal” value of MSC ships when held until retirement. |
| Purchasing is more cost effective by $29.6 million. | NPV Conclusions | Leasing is more cost effective by $10.4 million. |

The 1972 tanker deal highlights two major variables in the LvP decision: After-tax returns and discount rate selection. Unfortunately, very little LvP analysis criteria had been published prior to 1980 upon which Government entities could firmly base their analyses. In fact, the GAO Report *Build and Charter for Nine Sealift Tanker Ships* was the only document prior to July 1979 that discussed Federal Government leasing issues.29 Without an objective means to establish a discount rate, the DoD and GAO developed what each considered its best estimate; each, however, reached opposite conclusions.

The 1982 build and charter arrangement received significantly more interest and scrutiny than did its predecessors. To provide context and communicate this program’s high visibility and great complexity, we will journey through the MPS and T-5 tanker timeline identifying, as appropriate, the Program’s key players (annotated with an asterisk “*”) and their role in the LvP analyses.

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2. **Timeline**\(^{30}\)

- August 1979 – MPS Program authorized by the Honorable Harold Brown, Secretary of Defense.

- September 8, 1980 – MPS Program authorized by Congress*.

- October, 14 1981 – RFPs submitted, permitting either a charter or purchase of ships.

- November 1981 – Navy* and DoD* personnel conduct an informal meeting with IRS personnel regarding the impending Deal. No binding decisions made.\(^{31}\)

- December 8, 1981 – Deputy Secretary of Defense approved the convert and charter program for inclusion in the fiscal year 1983 budget with OMB concurrence.\(^{32}\)

- February 11, 1982 – Coopers and Lybrand (C&L)*, a “Big 8” accounting firm hired by the Navy to conduct a LvP analysis, completed its study.\(^{33}\) C&L’s model calculated the Lessor’s after-tax cash flow stream and solved for lease payments. It allowed for changes in financial, tax and economic variables such as discount rate, tax benefit, marginal tax rate, residual value and internal rate of return. C&L reported that

\(^{30}\) The TAKX and T-5 Replacement Tanker program chronology was assembled by the authors using Government and civilian sources who had direct involvement with the Program. These sources include, but are not limited to, the GAO, Congressional testimonies, and Argent Group Ltd. Other sources and amplifying information will be footnoted accordingly.


\(^{32}\) Ibid.

the Navy could charter a vessel at a present value cost as much as 35 percent below the acquisition cost if most of the following conditions occurred:

- The IRS treats the charters as service contracts;\(^{34}\)
- Long-term interest rates decline to approximately 12 percent;\(^{35}\)
- The Lessor will accept a 12 percent after-tax return on his investment;\(^{36}\)
- The Lessor can reinvest positive cash flow at a rate comparable to the return on the project;\(^{37}\)
- The Lessor and the lender will accept an equity position of less than 20 percent;\(^{38}\) and,
  - The Lessor takes advantage of tax benefits available through the Maritime Administration’s Capital Construction Fund (CCF) program.”\(^{39, 40}\)

Other assumptions made by C&L include the use of a ten percent discount rate and $108 million total purchase cost per TAKX unit; calculations based after-tax cash flows, five-year accelerated depreciation, and a 20 percent residual value. C&L also argued that tax revenue losses should not be included in the total cost of the Government because: (1) it assumed that the tax revenue losses would still occur if the charter programs did not exist, and (2) the tax revenue losses did not consider the tax

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\(^{34}\) The IRS issued a 143-page private letter ruling on December 10, 1984, which stated that the Time Charter was a “true lease” for tax purposes and, thus, the investment tax credit would not be available (see Forman, Jonathan. “Tax Considerations in Renting A Navy.” *Tax Notes*, 25 March 1985, 1193).

\(^{35}\) Long-term interest rate (i.e., Treasury borrowing rate) in 1982 was 13 percent. The charter, when considered as a 25-year loan, has an effective interest rate of 7 percent--well below the 13 percent long-term interest rate (see TAKX Maritime Prepositioning Ships: Relative Financing Costs of Charter and Purchase – Supplemental Report. Argent Group Ltd, 1982, 25).

\(^{36}\) Actual after-tax return on equity was 11.745 percent.

\(^{37}\) The actual reinvestment rate the Lessor’s received is not known; however, positive reinvestment cash flows can be reasonably assumed.

\(^{38}\) Actual equity position was approximately 30 percent.

\(^{39}\) The CCF program was not utilized.

\(^{40}\) Ibid, II-1-II-2.
implications on real economic activity. In other words, investors seeking tax shelters for their money would see the MPS/T-5 Program as an attractive way to do so. In the absence of similar programs, investors would devote their money to other tax-sheltering investments, resulting in the same net tax revenue “loss” to the Government. Accordingly, the tax benefits realized by the investor could be utilized for additional purchases, investments, etc., which have a positive, multiplying effect on the economy by actually increasing Treasury revenues through taxes on income received through the additional investments.

- March 1982 – Initial offers received.

- April 1982 – Through a competitive bid process, AGL* was selected to assist the Navy in analyzing the financial aspects of the Deal’s transactions.

- May 28, 1982 – The Honorable John F. Lehman, Jr.* (SECNAV), Secretary of Navy, sends a letter to the House Appropriations Committee stating that the Navy intends to maintain its policies in support of the American Merchant Marine and the American Shipbuilding Industry.

- July 1982 – AGL submitted initial reports on the relative financing costs of the charter and purchase.42 43

- July 20, 1982 – Congressman Joseph P. Addabbo, Chairman, Defense Subcommittee of the House Appropriations Committee, stated in a letter to the SECNAV


that the Navy’s original plans called for *procurement* of new and converted ships (the fiscal year 1982 Budget Amendment changed it to a charter arrangement). He also directed the Navy not to enter any contractual agreements with respect to the Deal until Congress reviewed the Investigative Staff’s LvP analysis of present value costs to the Government.44

- **July 30, 1982** – SECNAV agrees to “withhold any firm contractual arrangements” until Congress can take a look at the Deal.45

- **August 1982** – The Deal’s source selection completed.

- **August 17, 1982** – Congress advised that a selection and review process had been initiated for six firm contracts and seven options as defined in Section 303 of the FY 1983 *Authorization Act*. Section 303 required the Navy to notify “the Committees on Armed Services and on Appropriations of the Senate and the House of Representatives of [a] proposed lease” and the elapse of “a period of thirty days…after the date on which such Committees receive such notification.”46 Section 303 further provided that “any such notification shall include a description of the terms of the proposed lease and a justification for entering into such lease rather than obtaining the vessel involved by acquisition.”47 The Navy also awarded contracts to build and charter six TAKX ships with options to award seven additional TAKX ships in fiscal year 1983.48

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46 Everett Pyatt. Statement before the Subcommittee on Oversight of the House Ways and Means Committee on the Navy’s TAKX Program. 28 February 1983, 3.

47 Ibid.

48 It is unclear when the SECNAV received Congressional authorization to proceed with the contract awards, but one can reasonably assume he had such permission.
August 18, 1982 – Public notified of contract award and amount.  

August 19, 1982 – AGL submitted supplemental report on the TAKX MPS Program. This report utilized actual cost data as stipulated in the firm contract offer. AGL concluded that the Navy’s present value cost to charter the TAKX vessels would be $140.56 million per vessel, compared to a purchase cost of $184.01 million. Table 4 contains AGL’s basic assumptions:

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalized Cost of Vessel</td>
<td>$184.01 million</td>
</tr>
<tr>
<td>Cash Purchase Cost of Vessel</td>
<td>$184.01 million</td>
</tr>
<tr>
<td>Long-Term Debt Rate</td>
<td>13%</td>
</tr>
<tr>
<td>Equity Yield</td>
<td>23%</td>
</tr>
<tr>
<td>Investment Tax Credit (ITC)</td>
<td>10%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>5-year ACRS</td>
</tr>
<tr>
<td>Residual Value of Vessel</td>
<td>0%</td>
</tr>
<tr>
<td>Discount Rate</td>
<td>10%</td>
</tr>
</tbody>
</table>

Capitalize cost of the vessel (i.e., the total amount to be financed) was calculated by averaging the proposal amounts of the 13 TAKX vessels, which were subsequently adjusted to reflect the 14.5 percent prime interest rate that existed on the award date (August 17, 1982). The average capitalized cost was $184.01 million per vessel, which was assumed to be paid in cash as opposed to Treasury debt financed.


51 Ibid, Appendix A. Only key assumptions listed.
Long-term debt rate of 13 percent chosen as a realistic value of the Government’s cost of borrowing in August 1982.

Pre-tax equity yield of 23 percent reflected in the proposals, which represented a fair market value for such transactions.

Ten percent ITC selected for the base case; however, a “non-ITC” alternative case was also analyzed, which increased the charter cost by $23.57 million from a Navy-only perspective, but from a net total cost to the Government (NTCG) perspective (i.e., including the net Treasury cash flows from revenue inflows and tax/depreciation outflows), the non-ITC case was $3.84 million less expensive. AGL explained that this phenomenon occurs because “the non-ITC case does not have the large front-end Treasury outflow that is contained in the ITC case, but rather has larger capital hire payments occurring later, along with greater debt service requirements by virtue of greater leverage…on a present value basis at [a] 10% [discount rate], the net result to the Government is a lower cost.”

Both the ITC and non-ITC cases demonstrated that leasing was more cost effective than purchasing.

AGL selected depreciation based on the five-year accelerated cost recovery system (ACRS). This method provided a significant tax benefit to the Lessor, which he would, in turn, pass the majority of the benefits back to the Navy in the form of lower capital hire payments.

Zero residual value chosen because the after-tax present value of a vessel after 25 years would be minimal.

Ten percent discount rate utilized as prescribed by OMB Circulars A-76, A-94 and in the DoD Cost Comparison Handbook (DoD Instruction 7041.3).

NTCG also considered. NTCG is the present value sum of the rental, or capital hire, payments and the net effect on Treasury tax revenues as a result of the tax inflows and outflows generated by the Deal. For the TAKX vessels, the NTCG for leasing was $157.33 million compared to a $184.01 million purchase price. The NTCG

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52 Ibid, 16.
assumes that taxes paid by the investor would not otherwise be sheltered—an argument that AGL believed was doubtful.  

○ Although the *Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA)* had not yet become law, the effect of *TEFRA* would result in an $8.3 million per ship present value increase in the 25-year charter hire payment.  

- September 1, 1982 – Surveys and Investigations (S&I) Report submitted to the House Appropriations Committee. The S&I Report concluded that “using present value analysis and the OMB directed 10 percent present value discount rate, leasing the TAKX ships is advantageous to the Navy and the Government at all long-term interest rates less than 18-19 percent.” The Staff, however, had reservations about a possible adverse impact on the Navy Industrial Fund (NIF) due to the use of existing obligational authority rather than requesting specific Congressional approval and additional authority for both lease costs and termination liabilities. The S&I Report emphasized that obligations made on the Fund cannot exceed its unobligated balance, which the TAKX Program and its long-term obligations were in danger of doing. 

- September 14, 1982 – Senator John Tower, Chairman, Senate Armed Services Committee, wrote the SECNAV stating that the Navy was in compliance with Section 303 of the fiscal year *1983 Authorization Act* and approved the Navy’s pursuit of the TAKX vessels. 

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53 Ibid, 2.

54 Ibid, 24.


56 Ibid, 5.

• September 16, 1982 – Congressman Addabbo wrote the SECNAV to inform him the Defense Subcommittee of the House Appropriations Committee agreed, based on the S&I Report, that leasing the TAKX vessels was the better option.58

• September 17, 1982 – House Subcommittee on Readiness holds a hearing on the TAKX Program.59

  o George Sawyer, Assistant Secretary of the Navy (Shipbuilding and Logistics) stated that annual capital charter costs would be $14.95 million based on anticipated interest costs, which were $20 million less per ship than expected.

  o Congressman Dan Daniel, Chairman, Subcommittee on Readiness expressed dissatisfaction with the Navy’s use of long-term leases which “effectively circumvents the Congressional authorization/appropriations process and impedes timely and effective legislative review [and that] [o]nce the contract [had] been signed a long-term and binding Government obligation [would be] incurred that leaves Congress with the choice of providing the necessary funds or facing the unattractive prospect of substantial termination costs and possible legal implications.”60 So adamant was his belief against Congressional side-stepping that in his approval statement of the TAKX Program to Congressman Price, Chairman of the House Armed Services Committee, he said “[t]o allow this kind of situation to develop again would be intolerable and [that he would] do [his] utmost to see that appropriate action is taken to prevent such an occurrence.”61

• September 30, 1982 – AGL submitted its T-5 Tanker Replacement Supplemental Report.62 This report utilized actual cost data as stipulated in the firm contract offer.


59 George Sawyer and Dan Daniel. Statements made before the Subcommittee on Readiness of the House Armed Services Committee. 17 September 1982.

60 Ibid.

61 Ibid.

AGL concluded that the Navy’s present value cost to charter the T-5 vessels would be $49.54 million per vessel, compared to a purchase cost of $66 million. The analysis included the TEFRA revisions. Table 5 contains AGL’s basic assumptions:

Table 5.  AGL LvP Basic Assumptions for the T-5 Vessels

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalized Cost of Vessel</td>
<td>$66 million</td>
</tr>
<tr>
<td>Cash Purchase Cost of Vessel</td>
<td>$66 million</td>
</tr>
<tr>
<td>Long-Term Debt Rate</td>
<td>11%</td>
</tr>
<tr>
<td>Equity Yield</td>
<td>21%</td>
</tr>
<tr>
<td>Investment Tax Credit (ITC)</td>
<td>10%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>5-year ACRS</td>
</tr>
<tr>
<td>Residual Value of Vessel</td>
<td>0%</td>
</tr>
<tr>
<td>Discount Rate</td>
<td>10%</td>
</tr>
</tbody>
</table>

- Capitalized cost of the vessel was calculated by averaging the proposal amounts of the five T-5 vessels. The assumption was a cash purchase of the vessel on the scheduled delivery date (if the purchase option was pursued), or, if leased, the scheduled delivery date would be the charter start date.
- Pre-tax equity yield of 21 percent reflected in the proposals, which represented a fair market value for such transactions.
- Ten percent ITC selected for the base case. The “non-ITC” alternative case increased the charter cost by $6.56 million from a Navy-only perspective. However, from a total Government perspective, the non-ITC case was $1.24 million less expensive than the ITC case. Both the ITC and non-ITC cases demonstrated that leasing was more cost effective than purchasing.
AGL selected depreciation based on a five-year ACRS. This method provided a significant tax benefit to the Lessor, which he would, in turn, pass the majority of the benefits back to the Navy in the form of lower capital hire payments.

- Zero residual value chosen because the after-tax present value of a vessel after 20 years would be minimal.
- Ten percent discount rate utilized as prescribed by OMB Circulars A-76, A-94 and in the DoD Cost Comparison Handbook (DoD Instruction 7041.3).
- The NTCG for leasing was $53.59 million compared to a $66 million purchase price. Again, AGL’s analysis assumed the tax benefits realized by investors in the Deal were not incremental Government outflows; as such investors would invest in other similar transactions if the Deal had not occurred.\(^{63}\)

- December 2, 1982 – The Comptroller of the Navy requested the legal opinion of the United States Comptroller General (USCGEN) as to the proper manner in which to record certain obligations of the NIF in connection with the MPS/T-5 Program.

- January 14, 1983 – GAO opinion regarding termination liability accounting obtained. Options on the last seven ships exercised.

- January 28, 1983 – USCGEN’s office issued its report on the NIF in connection with the MPS/T-5 Program:\(^{64}\)
  - Upon vessel acceptance, the Navy must record the base period costs plus termination expenses as firm obligations against the NIF.
  - The Navy remained cautious of over-obligating the NIF. At that time, the NIF had sufficient resources to cover only $2.2 billion in new obligations (the 18 MPS/T-5 vessels represented approximately $2.65 billion in aggregate cost). If the Navy had to record these firm obligations, it would have been required to scale back the MPS/T-5

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\(^{63}\) Ibid, 2.

Program or risk violating the *Anti-Deficiency Act*, which provided that “An officer or employee of the United States Government or of the District of Columbia Government may not—(A) make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation; or (B) involve either Government in a contract or obligation for the payment of money before an appropriation is made unless authorized by law.”65

- Contingent liabilities were to be recorded as expenses to the extent that it was probable that (1) the liability would be incurred, and (2) the liability could have been reasonably estimated.

- The USCGEN concluded by stating “[i]t is [the USCGEN’s] view…that each Charter Party, once in effect, should be recorded as a firm obligation to pay lease costs for a 5-year base period, plus termination costs after that time. This would represent the least amount for which the Government will be liable under the contract” and recommended, among other suggestions, that the Navy approach Congress for specific statutory authority to proceed, and include in its request any anticipated reimbursements from future orders as budgetary resources of the NIF.66

- USCGEN posed no legal objection to the Deal so long as the NIF had the *unobligated* balance to cover the vessel’s cost.

- January 31, 1983 – “Rent-a-Navy” article appears in the *Washington Post*, which declared that the majority of the Deal’s cost is hidden from view because it shows up as a tax loss to the Treasury rather than a direct cost in the budget and that “Congress owes it to itself and the taxpayer to tell the Pentagon to terminate [the] leases immediately and to prohibit the evasion of budget limits.”67

65 31 U.S.C. Section 1341(a)(1), recodified from 31 USC. Section 665(a) (1976).
66 Ibid, 5-6.
• February 1983 – Institute for Defense Analyses (Program Analysis Division) (IDA) prepared a LvP analysis for the Office of the Secretary of Defense (Research and Engineering).\textsuperscript{68}

• February 15, 1983 – Joint Committee on Taxation (JCT)* issued its report on the Tax Aspects of Federal Leasing.\textsuperscript{69}
  o JCT stated that “the Federal Government, which enjoys the best credit, cannot [theoretically] gain by financing long-term capital projects through parties that require higher yields [because] [t]he market rate of interest paid by the lessor and the rate of return expected by its shareholders generally exceed the interest rate on Government bonds [due to] the Government’s superior credit. Therefore, when the Government leases, it compensates the lessor for greater financing costs than the Government would have borne had it borrowed funds and purchased the ships.”\textsuperscript{70}
  o JCT concluded that the Government would pay $20.8 million (on a present value basis) or more to charter each TAKX ship than it would to purchase the vessel using 100 percent Treasury debt financing.
  o JCT did not consider the cash inflow from income taxes the debt lender would pay as the borrower makes his debt payments, because the Government’s use of a pre-tax method of accounting, coupled with the Treasury cash inflows that would result from a Treasury-financed purchase, would negate one another and have a zero net Treasury effect.

\textsuperscript{68} Paul Munyon and John Wells. Institute for Defense Analyses, Program Analysis Division. Lease Versus Purchase of Naval Auxiliary Ships. February 1983. (IDA Paper P-1665). This report used similar assumptions and methodology as AGL and, thus, concluded that leasing was the more cost effective option. This report was subsequently revised in November 1983 to re-examine IDA’s methodology for calculating Government costs. See Chapter III.B.2 in “November 1983” portion of timeline for details.

\textsuperscript{69} United States Joint Committee on Taxation. Tax Aspects of Federal Leasing Arrangements. 15 February 1983. AGL rebuts JCT’s assumptions in the March 25, 1983, portion of the timeline, the summary of which can be found in Table 6.

\textsuperscript{70} Ibid, 2;18.
JCT also cited AGL for “double-counting” by crediting the Lender’s cash inflows from the lease but not counting similar Treasury cash inflows from financing a purchase.71

- JCT assumed a residual value of $5.1 million (present value dollars).
- JCT believed that the tax benefits of the Deal should be counted as part of the Government’s total cost. Specifically, JCT stated that

Two consultants’ reports commissioned by the Navy [AGL and C&L] contend that none of the tax benefits generated by a TAKX arrangement should be counted as a Government cost of leasing...[This] argument for not counting the tax benefits assumes that private parties would find an alternative means of sheltering their income from tax if the TAKX opportunity were not available. In effect, the argument assumes that the totality of investors, when presented with an additional profitable investment in TAKX ships, abandons or fails to start certain other investments which it also regards as profitable and would have carried out (but for the TAKX opportunity). The realistic response, on the contrary, is for investors to add the TAKX arrangements to the pool of profitable ventures to be undertaken. This increases the total amount of tax benefits claimed for investments. But even if investors were to react as the argument assumes, it would mean that the tax benefits going to the TAKX program were crowding out investments in other sectors of the economy. [Therefore, the] lost investment represents a social cost that is properly attributed to the TAKX program. Thus, in either event, net tax benefits to the Navy’s lessor should be counted in the Government’s total cost of leasing a TAKX ship.72

- February 23, 1983 – Senator Howard M. Metzenbaum (D-Ohio) wrote Donald T. Regan, Secretary of the Treasury, to describe the tax indemnification provision of the Deal as “outrageous” and asked him to “raise in the Cabinet the question of whether it is appropriate and acceptable for [the Navy] to subsidize a legal case against the IRS.”73 The “subsidization” of which Senator Metzenbaum spoke centered on the

71 Ibid, 21.

72 Ibid, 18-19.

Navy’s assumption of the legal fees associated with contesting a claim with the IRS if the Navy so directed the Contractor. Similar provisions, according to AGL, were (and are) common in commercial ship leases. The Navy was not obligated to indemnify or adjust charter hire as a result of an adverse IRS decision on any issues that had been addressed in the advance IRS rulings on the Deal. In fact, the adjustment in charter hire permitted and/or the Navy’s indemnification obligations were limited to four events:74

- A change in Federal tax law between the Best and Final offer and delivery of each ship;
- The Time Charter ruled by the IRS to be a lease of the ship to the Navy rather than a service contract;
- A Navy breach of its contractual and legal obligations; and/or
- Navy-originated permanent modifications made to the vessels.

- February 25, 1983 – Article “Navy Promises Suppliers Tax Breaks” published in the Washington Post.75 Senator Metzenbaum again voiced his displeasure regarding the Deal: “The whole idea of the Navy leasing ships instead of buying them has raised some eyebrows on [Capitol Hill], but discovering that we would subsidize these companies if the Internal Revenue Service rules against these questionable tax breaks is absolutely unbelievable.”76 The Navy responded that it had “executed a charter program for cargo-carrying services based on sound business practices, [that it was] mindful of current tax laws and the best interests of the American people, [and that it did so] in full and public view with the express permission of Congress.”77 The article likened the tax breaks as a practice similar to the buying and selling of corporate tax breaks that were allowed in the 1981 tax bill, but subsequently restricted by Congress in the TEFRA.

74 John Lehman. Response to Charles B. Rangel’s, Chairman, Subcommittee on Oversight of the House Ways and Means Committee request for answers to additional Committee questions from the Subcommittee’s February 28, 1983 hearing on Federal leasing practices. 18 March 1983.


76 Ibid.
February 28, 1983 – Everett Pyatt, Principal Deputy Assistant Secretary of the Navy (Shipbuilding and Logistics), statement before the Subcommittee on Oversight of the House Ways and Means Committee regarding the Navy’s TAKX Program:

- The Program allowed the use of commercial specifications, which reduced the program’s cost by $35 million per ship.
- Congressional review included a study by the House Appropriations Committee Staff (S&I), hearings by the House Armed Services Readiness Subcommittee and staff reviews by the above committees plus the Subcommittee on Oversight and the House Ways and Means Committee—all provided written concurrence that allowed the Navy to award the TAKX build and charter contracts.
- The Navy also received written correspondence from three of the four Committees agreeing to the T-5 build and charter contracts. The fourth allowed the 30-day review time period (as required by law) to expire. The Navy delayed the T-5 conversion an additional 53 days before it informed the Contractor to proceed—the Navy granting permission to proceed was necessary to avoid cost overruns that the Navy would have had to pay as a result of the delay.
- Pyatt stated that the conclusions of the independent LvP studies indicated that chartering the TAKX/T-5 vessels could save the Navy 19 percent of the ship’s cost in present value dollars. However, he also revealed that the assumptions (i.e., discount rate, pre-tax/after-tax basis, and various participant tax rates) were variable and could have a range of results from a 15 percent savings to a five percent additional cost.

77 Ibid.
78 Everett Pyatt. Statement before the Subcommittee on Oversight of the House Ways and Means Committee on the Navy’s TAKX Program. 28 February 1983.
79 Ibid, 2-3.
80 Ibid, 3.
81 Ibid, 3.
82 Ibid, 7.
The time charter would also be a “true” or “guideline” lease under IRS rules rather than a service contract, which meant that investors would not be eligible for the ITC. As a result, the Navy’s capital hire payments would be increased to compensate the investor for the tax benefit loss.

In regard to the legal fees that were subject to Senator Metzenbaum’s angst, Mr. Pyatt emphasized that legal fees associated with charter and build contracts were common and assured Congress that “[n]o legal expenses incurred in connection with lawsuits, actions, disputes or similar proceedings in which the Government is an adverse party may be included in the Basic Capitalized Costs; however[,] [t]he fees may be adjusted to reflect actual costs, but cannot exceed the amount proposed by the offeror.”

March 18, 1983 – Letter from Charles B. Rangel, Chairman of the Subcommittee on Oversight of the House Ways and Means Committee, sent to the SECNAV with further questions regarding the TAKX/T-5 Program. SECNAV responded with answers to each question the same day. Below is a summary of the answers (those not previously discussed) found in the SECNAV’s response document:

- All payments will be made out of the NIF.
- The Time Charter provides that if the Navy fails to exercise an option at the end of each five-year period then:
  - The Owners may keep the ships and the Navy has no obligation to pay any amount;

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83 Ibid, 10.

84 How the SECNAV was able to respond the same day is unclear. The SECNAV’s responses were attached to Congressman Rangel’s letter—both documents were dated “March 18, 1983.”

85 Charles Rangel. Letter to the Honorable John F. Lehman Jr. regarding Federal leasing practices. 18 March 1983. The responses to the Committee’s questions were dated March 18, 1983, and were attached to Chairman Rangel’s letter to the SECNAV. The documents themselves were gathered from AGL’s archives. Although the authors have not directly authenticated the response’s source, the answers to the Committee’s questions are in-line with all other data gathered on the MPS/T-5 Program.
The Owners may sell the ships and the Navy is obligated to pay the
deficiency, if any, between the sale price and agreed termination value schedule;
- The Navy has the right up to five days prior to the termination date
and sale to rescind its termination notice and continue the charter; or
- The Navy has the option of purchasing the ships at the then current
fair market value but not less that the termination value.86
  - Assumed residual value at the end of the lease was 20 percent, based on a
$184 million or $66 million dollar capitalized cost for the TAKX and T-5 vessels,
respectively.

- March 25, 1983 – AGL issued an analysis of the JCT’s report on the Tax
Aspects of the TAKX MPS Program and other concerns.87 AGL offered the following
information in rebuttal to the JCT’s February 15, 1983, report—all conclusions are based
on AGL’s own analyses:
  - A representative TAKX ship (i.e., Maersk Vessel Number Three) was
used in AGL’s report.
  - The $50.1 million present value difference between the AGL and JCT
analyses centered on four key areas: methodology, treatment of residual value,
recognition versus non-recognition of transactional costs, and rounding and discounting.
Each will be discussed below:88
  - Methodology ($39.7 million difference)
    - AGL measured all Treasury cash inflows and outflows and
compared the build and charter program to a cash purchase. JCT assumed 100 percent

86 Ibid.

87 Analysis of the Report by the Staff of the Joint Committee on Taxation Regarding Tax Aspects of
the TAKX Maritime Prepositioning Ship Program and Other Concerns. Argent Group, Ltd. 25 March
1983. Expressed at a hearing before the Subcommittee on Oversight of the Committee on Ways and
Means on February 28, 1983.

88 Ibid.
Treasury debt financing for a direct purchase and concluded that it was unnecessary to count the income taxes realized from the debt portion of the lease.

- As previously stated in the JCT report on February 15, 1983, JCT did not consider the cash inflow from income taxes the debt lender would pay as the borrower makes his debt payments because the Government’s use of a pre-tax method of accounting coupled with the Treasury cash inflows that result from a Treasury-financed purchase would negate one another, making the net Treasury effect zero.

- JCT cited AGL for “double-counting” by crediting the Lender’s cash inflows from the lease but not counting similar Treasury cash inflows from financing a purchase. AGL denied double counting because it assumed that the Government would pay cash to acquire the vessels in a direct purchase instead of using 100 percent Treasury debt financing. A cash purchase results in no Treasury cash inflows from taxes on interest income, since there would be no lender to receive the interest income.

- JCT assumed a pre-tax discount rate; AGL did not. AGL used a ten percent discount rate, but, in addition, conducted a discount sensitivity analysis that used discount rates from five percent to 14 percent—the long-term debt rate at that time was approximately 12 percent. AGL also stated that entities that purchased Treasury obligations during this period had an approximate overall tax rate of 12-15 percent, and concluded that the after-tax equivalent of a 12 percent Treasury bond was 10.2 percent—near the ten percent discount rate used by AGL in its analyses.

- JCT treated the debt portion of the leveraged lease and the debt portion of a long-term Treasury bond as equivalent. AGL argued that the marketplace does not see them as equivalent because purchasers of each security have different economic profiles, and, thus, would have different after-tax returns.

• Residual Value Treatment ($5.1 million difference)
  - JCT assumed the net present value cost at the end of a 25-year charter was $5.1 million, which equated to a $108.9 million future value—or, approximately 60 percent of the ship’s cost. AGL dismissed JCT’s assumption as “too speculative to be used as the best estimate of what the Navy would be required to pay to purchase the ship in 25 years.” AGL assumed a zero percent residual value since any future salvage value would be minimal in a present-value sense. This assumption notwithstanding, AGL also performed an analysis using a 20 percent residual value, which equated to a $1.7 million present value cost. Given this new residual value assumption, AGL’s analysis showed a $27.6 million cost advantage to charter as opposed to JCT’s $17.4 million purchasing cost advantage.

• Recognition or Non-recognition of Transactional Costs ($4.2 million difference)
  - JCT considered the transactional costs associated with leasing to be $4.2 million more than if the vessels were purchased. AGL disagreed. AGL argued that a Government purchase would involve its own unique costs and would avoid potential construction overruns, the net effect of which would negate any purchasing cost savings over a charter transaction.

• Rounding and Discounting ($1.1 million difference): As the subtitle suggests, a $1.1 million discrepancy in the rounding calculations and present value analyses existed between JCT and AGL.
  - Tax Considerations
    - JCT and AGL agreed that the two most important issues surrounding the LvP analysis were (1) whether the Lessor/Owner would be treated as the

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90 Analysis of the Report by the Staff of the Joint Committee on Taxation Regarding Tax Aspects of the TAKX Maritime Prepositioning Ship Program and Other Concerns. Argent Group, Ltd. 25 March 1983, 6. Expressed at a hearing before the Subcommittee on Oversight of the Committee on Ways and Means on February 28, 1983.

91 Ibid, 8.

92 Ibid, 8.
owner of the ship for tax purposes and (2) whether the Navy’s Time Charter is a usage charter rather than a service charter. The former would make the ITC unavailable to the Lessor, and, subsequently, increase the Navy’s charter payments.

- In regard to Federal tax ownership, JCT stated that “[u]nder the TAKX arrangement, the Navy bears significant risks, which raises questions as to whether the shipowner will in fact be treated as the owner for Federal tax purposes and, thus, whether any of the assumed tax benefits will be available.” 93 AGL argued that similar transactions involving time charters (e.g., 1972 charter and build arrangement for nine tanker ships) involved the same risks and should not impact the tax benefits of the Deal; neither should it impact the “true lease” nature of the contract.94

- In regard to the usage versus service contract disagreement, the JCT stated that

  [t]he TAKX charter arrangement raises several issues relevant to the determination of whether the investment credit will be available to the Shipowner. The allocation of rights and duties among the parties to the Time Charter and the purpose for which the TAKX ship is required by the Navy may distinguish the TAKX charter arrangement from the cases that have been considered by the Internal Revenue Service and the Court of Claim [sic] under the service contract exception.95

- AGL cited a series of private IRS rulings dating back to 1970 dealing with transactions similar in structure to the TAXK Program that ruled in favor of a service contract (i.e., the ITC was available).96

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95 Ibid, 15-16.

96 Ibid, B-1 through B-4.
• In the absence of the ITC, AGL concluded that the Navy’s charter hire payment would increase by $2.4 million and would decrease the chartering cost advantage to $29.5 million. In addition, NTCG, including all cash inflows to and from the Treasury, would increase to $34.6 million.97

• June 8, 1983 – John E. Chapoton, Assistant Secretary of the Treasury (Tax Policy), testified before the House Ways and Means Committee.
  o Discussed H.R. 3110, the *Governmental Leasing Act of 1983*, which would deny certain tax incentives for property used by Governments and other tax-exempt entities.98
  o The Treasury Department supported the Bill as it applied to property used by domestic entities and foreign Governments.

• June 28, 1983 – USCGEN (a.k.a. GAO) issued an analytical report on DoD’s use of long-term capital leases.99
  o GAO recommended that Congress pass legislation to prevent DoD from entering into long-term leases without Congressional analysis and authorization.100
  o GAO assumed AGL used constant dollars when discounting instead of using current dollars (AGL rebutted this assumption and stated that its studies used current dollars).
  o GAO alleged, using the JCT’s methodology and assumptions, that its and the JCT’s analyses demonstrated true LvP costs. Both GAO and JCT used a pre-tax methodology, which considered all tax outflows from the Treasury but only a portion of


98 H.R. 3110 was introduced by Congressman James J. Pickle and was known as the “Pickle Bill.”


100 Ibid, 19. Section 303 of the fiscal year 1983 *Defense Authorization Act* required the Navy to notify the House and Senate Appropriations and Armed Services Committees prior to entering long-term leases (see Public Law 97-252, *Department of Defense Authorization Act of 1983*), but, as the Comptroller General points out, this requirement would not apply to any future long-term leases.
the inflows (i.e., GAO/JCT did not consider the additional revenue generated by the debt-
portion of the financing arrangement—the taxable interest income paid to the Lessor
which would create a Treasury inflow).

- The differences between the after-tax methodology and assumptions used
  by AGL, C&L and the S&I Staff, and the pre-tax methodology and assumptions of the
  JCT and the GAO, are integrated into AGL’s March 25, 1983, analysis of the JCT
  report.101

- November 1983 – IDA published its revised report on the LvP of Naval
  auxiliary ships.102 Although this report expanded the ideas of the February 1983 IDA
  report, the general conclusion that leasing was more cost effective than purchasing
  remained valid.

Although the timeline continues into 1984 and beyond, the major controversy
surrounding the LvP decision and related analyses by various independent groups was
largely complete by the end of 1983. In sum, the Deal created an analytical chasm
between two main players: GAO and the Navy. The Navy, who used AGL’s analysis as
support, advocated leasing as the most cost-effective option; GAO, on the other hand,
used the JCT’s analysis to support its opinion that purchasing was the more cost-effective
option. Table 6 summarizes these parties’ methodology, assumptions and conclusions in
regard to the three main contentious issues: (1) How to deal with tax benefits; (2) How to
deal with the discount rate; and (3) How to deal with the residual value.

101 AGL, C&L, S&I and the IDA all used similar methodologies and assumptions to conclude that
leasing would be more cost-effective than a direct purchase. On the contrary, the JCT and GAO
reached the opposite conclusion using different methodologies and assumptions. Hereafter, the authors
will merge these players into two LvP analytical groups: Navy (leasing advocate) and GAO
(purchasing advocate).

102 Paul Munyon and John Wells. Institute for Defense Analyses. Alternative Methods for the
Analysis of Lease/Purchase Options in Naval Auxiliary Ship Acquisition. November 1983. (IDA Paper
P-1665 (Revised)).
Table 6. Navy and AGL vs. GAO and JCT: Methodology, Assumptions and Conclusion Controversies of the 1982-83 Deal\textsuperscript{103}

<table>
<thead>
<tr>
<th>Controversy</th>
<th>Navy/AGL</th>
<th>GAO/JCT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax Benefits</strong></td>
<td>Measured all Treasury cash inflows and outflows as the net total cost to the Government. All purchases were to be made with cash. The cash outflows represent the Treasury’s revenue loss from the Lessor’s accelerated depreciation tax benefits and cash inflows are the revenue gains from taxes payable on income resulting from the charter transactions.</td>
<td>Measured all Treasury cash outflows, but not all the inflows. All purchases were to be made using 100% Treasury debt financing. Cash outflows represent the Treasury’s revenue loss from the Lessor’s accelerated depreciation tax benefits. GAO/JCT concluded that it was unnecessary to count interest income from the debt because the Government’s pre-tax method of accounting did not require it to be counted.</td>
</tr>
<tr>
<td><strong>Discount Rate</strong></td>
<td>Assumed an after-tax discount rate of 10.25% (5% semi-annually). A 10% discount rate was prescribed by OMB Circulars A-76, A-94 and by the DoD Cost Comparison Handbook (DoD)</td>
<td>Assumed a pre-tax discount rate of 10.25% (5% semi-annually). The Navy instructed all contract bidders to use this rate in their submissions (See Amended Solicitation Number N00024-</td>
</tr>
</tbody>
</table>

\textsuperscript{103} Analysis of the Report by the Staff of the Joint Committee on Taxation Regarding Tax Aspects of the TAKX Maritime Prepositioning Ship Program and Other Concerns. Argent Group Ltd. 25 March 1983. Data compiled by authors from AGL’s analysis of the JCT report.
Instruction 704.3). AGL also conducted a discount rate sensitivity analysis with rates ranging from 5-14%. Any discount rate above 7.12% (TAKX) and 6.38% (T-5) would result in leasing being the more cost-effective option.

<table>
<thead>
<tr>
<th>Residual Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initially assumed to be 0% because the Navy would “expend” most of the ship’s value during its 20-25 year lease. The discounted NPV value of any remaining salvage value would be negligible. A 20% residual value was eventually used as a realistic compromise.</td>
</tr>
<tr>
<td>Assumed the NPV cost at the end of a 25-year charter was $5.1 million, which equates to a 60% residual value in current year dollars.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conclusions (all values in NPV)(^{104})</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAKX</td>
</tr>
<tr>
<td>NTCG for leasing: $157.33 million compared to a purchase cost of $184.01 million.</td>
</tr>
</tbody>
</table>

\(^{104}\) TAKX conclusions based on a representative ship: Maersk Vessel Number Three. T-5 conclusions based on Shipholdings Vessel Number Three.
The T-5 Program was not specifically analyzed by the GAO/JCT, but given its methodology and assumptions, leasing the T-5 vessels would prove to be more costly.

C. SPECIAL LEGISLATION

The special legislation enacted to assist the Navy in meeting its contractual obligations under the Deal are as follows:

- **Supplemental Appropriations Act of 1983** (P.L. 98-63): Congress granted the Navy authority to proceed with the MPS/T-5 Deal in the absence of an appropriation covering the total termination liability of the lease agreements.105

- **Appropriations Act of 1985** (P.L. 98-473): Congress provided the Navy with additional contract authority, which allowed the Navy to proceed with the Deal in the absence of an appropriation or existing unobligated balance sufficient to cover the total lease payments for all five years of the five-year base period.106

Under the aforementioned appropriation acts from 1983 and 1985, Congress required the Navy to record annually against its industrial fund an amount equal to the Deal’s estimated lease payments for the then current lease year. With respect to termination liability, Congress required the Navy to record against its then current fiscal year Operation and Maintenance appropriation, an amount equal to ten percent of the gross termination costs for failure to renew the leases. Without this specific authorization, the Navy would have been required to record the full amount of the gross

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106 Ibid.
termination costs as well as the full amount of the estimated lease payments for the first five-year lease base period (the highest termination values for the MPS/T-5 Program occurred during the first five years. The termination liability for failing to renew the lease after this period was estimated to be 128.1 percent of the Lessor’s cost to acquire the ship).\textsuperscript{107} See Appendix C for a sample MPS/T-5 termination value schedule based on Maersk and Shipholdings Vessel Number Three.

D. CAPITAL HIRE COMPONENT OF LEASES

In an effort to avoid the up-front procurement costs associated with a purchase, the Navy chose instead to lease the MPS/T-5 vessels. By leasing, the Navy spread its payments over a longer period of time, which eliminated a large initial procurement obligation. Through the use of the NIF, the Navy preserved procurement funds for higher priority combat vessels, allowing it to acquire mission-essential combat and non-combat-related vessels. In addition, the Deal permitted the use of commercial ABS specifications which allegedly saved taxpayers over $35 million per vessel.\textsuperscript{108}

Further, the Navy was not required to make any payments on the vessel until it found the vessel’s construction to be fully acceptable. Upon acceptance, the capital hire rates were adjusted to reflect the actual debt and equity financing rates and the Navy would begin its series of bi-annual capital hire payments—paid on the 15\textsuperscript{th} of January and July—for the duration of the contract. Once the rates were adjusted, the Navy’s capital hire rates and termination values were fixed for the entire charter period.\textsuperscript{109} The capital hire rate\textsuperscript{110} consisted of the debt and equity financing provided by the Lender and the Lessor plus their required rate of return (i.e., the amount of ‘return’ to Equity Investors).

\textsuperscript{107} Ibid.

\textsuperscript{108} Everett Pyatt. Statement before the Subcommittee on Oversight of the House Ways and Means Committee on the Navy’s TAKX Program. 28 February 1983, 2-3.

\textsuperscript{109} See Appendix C for the capital hire rates and termination value schedules for Maersk Vessel Number Three (PFC JAMES ANDERSON) and Shipholdings Vessel Number Three (SAMUEL L. COBB).

\textsuperscript{110} The Navy’s total bi-annual lease payments consisted of both capital hire and operating hire. Operating hire, the payment made to compensate the vessel’s operator for services rendered, would be payable regardless of the acquisition method and, thus, has no incremental effect on the capital hire analysis.
Again, this payment was made on a “hell or high water” basis, meaning that the payments were unconditional.

The MPS leases were five-year contracts with four 5-year options totaling 25 years; the T-5 vessels were five-year contracts with three 5-year options totaling 20 years. If the Navy failed to exercise any of the renewal options or terminated for convenience after the initial five-year period, the vessel being terminated would be sold and the Navy would pay any difference between the selling price and the pre-determined termination value—a value designed to repay the debt and equity participants for their investment plus their required return up to the termination date.

Further, all 18 contracts had purchase options to be exercised by the Navy at any time during the contract. The Navy could, at its option, purchase the vessels at the higher of termination or market value. Termination values were significant in the early years of the lease (up to 125 percent of the ship’s value) to ensure the investors received their required rate of return regardless of the Navy’s decision to continue the contract. Either way, the Navy bore the liability and subsequent risk. This scenario, however, was (and is) no different than one would expect in the commercial sector.

One highly controversial benefit of leasing, which lowered the Navy’s capital hire payment, was the “pass-through” of Lessor tax benefits. The Government, as a non-taxable entity, was ineligible for tax benefits in connection with the Deal. However, one of the major benefits of investing in the MPS/T-5 Program from an Owner-Participant (i.e., Lessor) perspective was his ability to claim accelerated depreciation. The vessel’s entire capitalized cost would be depreciated over a five-year period, resulting in significant Lessor tax savings. An appreciable portion of these savings was calculated into the Navy’s capital hire payment, which resulted in lower lease payments.

Potential equity investors were also attracted to the ITC as an additional tax benefit, but a December 10, 1984, IRS ruling declared the time charter a ‘usage’ vice a ‘service contract,’ making the ITC unavailable.111 As a result, the pre-negotiated capital hire provisions increased the capital hire payments.

111 The IRS issued a 143-page private letter ruling on December 10, 1984, that the time charter was a true lease for tax purposes and, thus, the investment tax credit would not be available (See Forman, Jonathan. “Tax Considerations in Renting A Navy.” Tax Notes, 25 March 1985, 1193.)
As Appendix C illustrates, no capital hire payments were made until the Navy accepted delivery of the vessel. At that point, the capital hire payments began and were modest during the first five years of the contract. These first payments were lower due to the Lessor’s accelerated depreciation tax benefit. In the second five-year renewal period, however, the capital hire payments began to increase, and continued to do so at each five-year contract renewal. Higher lease payments later in the contract benefited the Navy—and the Government as a whole—due to the time value of money. In short, the later and greater the capital hire payments, the more present value savings realized by the Navy relative to higher capital hire payments made early in the leasing period. The present value savings increases with the discount rate, making larger capital hire payments occurring later in the contract period lower in a net present value context.

E. PURCHASE OF THE T-5 TANKERS

In early 2001, MSC realized it was quickly approaching a decision point with regard to the disposition of its five leased T-5 tankers. MSC planned to charter each tanker for 20 years following each vessel’s delivery—a process that began June 1985 and ended April 1986. The last of the twenty-year leases would end April 2006, leaving MSC with an unfilled tanker requirement. It was this set of circumstances that prompted MSC to investigate possible replacement alternatives. Through its 2001 study titled T-5 Tankers: Replacement Alternatives, MSC analyzed four T-5 tanker alternatives:112

- Allow the charters to expire and enter into new charters in 2005;
- Begin the process of building replacement ships;
- Negotiate an extension contract; or
- Exercise the purchase option.

Of the four alternatives, MSC decided to purchase four of the five T-5 tankers. Four of the tankers (Shipholdings Numbers One, Three, Four and Five) were purchased on January 15, 2003, two for $25 million and two for $23 million. The fifth tanker (Shipholdings Number Two - Gus W. Darnell) was not purchased because an equitable

price could not be struck between MSC and the Equity Owners.

The choice to eventually exercise the option to purchase the T-5 tankers was reached only after careful consideration. Specifically, the financial aspects of each alternative were evaluated, which considered the time value of money, operating expenses, insurance, and any penalties that may have applied at the time of purchase. A summary comparison regarding the alternative selection process follows:

1. Allow Charter to Expire & Enter into New Charter

One solution would have been to do nothing and allow the charters to expire and then enter into new charters. MSC’s only requirement would have been to give the owners 120 days notice before re-delivery of the vessels and then return the vessels to a US port where they would have undergone a final inspection to ensure they were in good operating condition. Upon passing their inspection, the tankers would have entered commercial service as determined by their owners.

Unfortunately, this alternative would have resulted in MSC reverting to the open market to fill the tanker requirement. During the 1980s, when the T-5 tankers were built, an abundance of tankers existed. However, several circumstances changed the tanker availability. The Oil Pollution Act of 1990, passed in the shadow of the Exxon Valdez disaster, required that any tanker built after 1990 be double-hulled. In addition, the Act slowly phased-out all existing single-hulled tankers; fortunately, the T-5 tankers were double-hulled. However, the shipbuilding industry has not kept pace by building new tankers to replace the phased-out, single-hulled tankers, which has resulted in a shortage of double-hulled tankers.

In addition, the Jones Act, passed in 1917, required all cargo, including oil products be 1) moved between US ports, 2) carried in ships which were manufactured in the US, 3) 75 percent ownership by US parties, and 4) crewed by American citizens. This requirement, which is often referred to as “Jones Act vessels,” further reduces the quantity of available tankers because it eliminated the possibility of using foreign carriers.

Thus, if MSC chose to charter new tankers it would be required to enter the US commercial tanker market, which was experiencing a short supply of Jones Act tankers
and, consequently, charging premium rates for tanker leases. At the time of its tanker report, MSC estimated daily tanker lease rates in the shrinking US commercial market ranged from $20,000 to $30,000 per day in 2001.\textsuperscript{113} In its analysis of alternatives, MSC created a spreadsheet, reproduced in Table 7 below, which calculated the total cost of the T-5 Program from January 2002 through 2015, using daily charter prices in 2001 dollars.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Daily Charter Costs & Total Costs 2002-2015 ($Millions) & Total Costs 2002-2015 ($Millions PV) \\
\hline
$25,000 & $892 & $617 \\
30,000 & 1,014 & 692 \\
35,000 & 1,137 & 766 \\
40,000 & 1,259 & 841 \\
\hline
\end{tabular}
\caption{Expire & New Charter Costs\textsuperscript{114}}
\end{table}

Thus, Table 7 shows the cost of letting the charters expire and then entering into the US open market to find either new or used tankers to charter. Before any real conclusions can be drawn, however, a comparison of the other options and their costs must be made.

2. Build Replacement Tankers

The alternative to build replacement tankers was the most expensive option. This option required the most coordination, and presented the highest level of urgency, since MSC estimated that it would take three years, on average, to build a tanker. This alternative would have required MSC to begin the construction process immediately if it wanted to replace the tanker fleet before lease expiration. In addition, MSC found it difficult to determine the exact cost of a new tanker; however, it did estimate the cost to

\textsuperscript{113} Ibid, 8.

\textsuperscript{114} Ibid.
be between $70 to $90 million if built in 2005. Finally, regardless of whether MSC chose to procure the tankers or charter them, MSC would have to endure a lengthy Congressional approval process.

Table 8 reveals the program costs for the completion of the T-5 tanker charters and the procurement of five new T-5 tankers. It also assumes that the ships take three years to build and have outlays spread throughout the three years. Residual values are also considered.

Table 8. Replacement Tanker Costs115

<table>
<thead>
<tr>
<th>Price per Ship ($Millions)</th>
<th>Total Costs 2002-2015 ($Millions)</th>
<th>Total Costs 2002-2015 ($Millions PV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$70</td>
<td>$833</td>
<td>$685</td>
</tr>
<tr>
<td>75</td>
<td>846</td>
<td>701</td>
</tr>
<tr>
<td>80</td>
<td>860</td>
<td>717</td>
</tr>
<tr>
<td>85</td>
<td>874</td>
<td>733</td>
</tr>
</tbody>
</table>

Table 8 also shows the cost of letting the charters expire and the cost of a new build and charter program. Since the cost of future construction is difficult to ascertain, this choice is the most expensive and bears the most risk.

3. Negotiate an Extension

The original T-5 charters did not contain an extension provision, but it is possible that one could have been negotiated. There are two major issues with this alternative: securing Congressional approval and forecasting the future cost of the charter. Congress would want to know the forecasted amount before it would approve the charter extension, and MSC would not be able to negotiate the charter extension until it had Congressional

115 Ibid, 10.
approval. Furthermore, since the 1980s, laws and regulations have changed and MSC would now have to accomplish several measures before the charters could be extended: Obtain OMB approval, prepare a LvP analysis for the Secretary of Defense, acquire Congressional authority for a long-term lease, and secure Congressional or OMB special budgetary authority.

Provided MSC was able to meet all rules and regulations, MSC could then enter into negotiation with the tankers’ equity owners. While estimates vary, MSC estimated the extended leases would range from $7,000 to $10,000 per day. Table 9 summarizes this option.

Table 9. Negotiated Extension of Tanker Costs

<table>
<thead>
<tr>
<th>New Capital Hire Per Diem</th>
<th>Total Costs 2002-2015 ($Millions)</th>
<th>Total Costs 2002-2015 ($Millions PV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7,000</td>
<td>$843</td>
<td>$588</td>
</tr>
<tr>
<td>8,000</td>
<td>861</td>
<td>600</td>
</tr>
<tr>
<td>9,000</td>
<td>880</td>
<td>611</td>
</tr>
<tr>
<td>10,000</td>
<td>898</td>
<td>623</td>
</tr>
</tbody>
</table>

Table 9 shows the cost of continuing the leases and then negotiating an extension at the end of the original lease. Again, this option must be compared with the other options before reaching a conclusion.

4. Purchase the Tankers

The final and most cost effective alternative was to exercise the T-5 purchase options and procure all five tankers. During the original charter negotiations MSC negotiated the option to purchase the tankers on any capital hire payment date (January or July 15 of each contract year). MSC’s only obligation was to notify the contractors and ship owners no less than 140 days before the capital hire payment dates.

116 Ibid, 11.
The price MSC would pay for the ships was based on the greater of either the termination value of the charter or the current fair market value price. The termination value of the tankers was predetermined based on the capital hire payments in the 1980s and has not changed. The fair market value was determined based on a market survey. MSC’s analysis, as illustrated in Figure 10, shows a point on the graph (Point A) where the market value and the termination value are equal. In theory, all things being equal, this location is the most cost effective point—i.e., where the vessels should be purchased if MSC decided to purchase the tankers.

![Figure 10. Termination & Projected Market Values](image)

However, there are several other factors that need to be considered. MSC realized an estimated additional $2,600 daily cost under its current contract than it would with a competitive contract, due to the operating rate being set in the early 1980s. In addition, MSC paid $1,760 per day to insure each ship. These amounts would not be paid if MSC purchased the vessels.

These two factors favor purchasing the ships earlier than the graph in Figure 10 depicts due to the insurance cost savings. On the other hand, there are several

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117 See termination values in Appendix C.

termination costs that MSC might be required to pay depending on procurement timing.

First, if MSC chose to exercise its option on any date other than the five-year option period date then MSC would pay a “termination for convenience” payment. This payment pays for contract closing costs, any unallocated overhead, lease cancellation, and any other unforeseen administrative expenses.

Second, other termination costs included full payment of the Government bonds issued by the FFB to the Deal’s special purpose entities. These bonds were not callable—the FFB required that if the bonds were redeemed early, they must be redeemed at an equivalent bond market price, not their face value. Thus, if the rate of return on like-term bonds was the same or higher than the rate of return on the bonds issued to finance the tankers, the FFB would consider the deal a wash. However, if the rate of return on the like-term bonds was lower, a premium called a “breakage fee,” would have to be paid.

Taking all these factors into consideration, MSC estimated the value of the procurement as presented in Table 10. This table shows the costs of purchasing the tankers outright and is by far the most cost effective choice when compared to the other alternatives. Table 10 assumes the simultaneous purchase of all five tankers (to save on transaction costs), and combines the savings received from all cancelled insurance payments, reduced operating costs and termination expenses.

<table>
<thead>
<tr>
<th>Buy All Ships in January of:</th>
<th>Total Costs 2002-2015 ($Millions)</th>
<th>Total Costs 2002-2015 ($Millions PV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$587</td>
<td>$439</td>
</tr>
<tr>
<td>2003</td>
<td>600</td>
<td>446</td>
</tr>
<tr>
<td>2004</td>
<td>616</td>
<td>457</td>
</tr>
<tr>
<td>2005</td>
<td>648</td>
<td>480</td>
</tr>
</tbody>
</table>

119 Ibid, 14.
5. **Comparison of Alternatives**

A comparison of the four alternatives reveals the T-5 tanker purchase as the most cost effective. MSC’s graph, reproduced in Figure 11, validates this selection. However, there are other factors not represented in this chart that provided benefits by purchasing the vessels. These purchases involved virtually no effort: it was merely a factor of exercising a preexisting option and securing the funding. Any of the other three options would have required leasing approval through the Secretary of Defense, Congress, and OMB, which would have been very time consuming and controversial.

![Figure 11. Comparison of Alternatives](image)

Another purchasing benefit was no lapse in service. One day the vessels belonged to special purpose Equity Owners and the next day they belonged to the Navy. The only

120 Ibid, 15.
other option that would have provided this continuous level of service would have been to extend the leases. The procurement alternative also avoided the three-year construction waiting period, which would have been required if replacement tankers had been built.

F. FUTURE OF THE GLOBAL MARITIME PREPOSITION FORCE SHIPS

As the 25-year lease period for the ships of the MPS Program draws to a close during this first decade of the 21st Century, the Navy will need to purchase the 13 vessels of the current Global MPF. But is the Global MPF as it exists today a viable concept for the future? In 1997, the USMC articulated a new operational doctrine for forward deployment of its forces called Operational Movement From The Sea (OMFTS), which involves sea basing USMC logistic support. This doctrine assumes that land-based facilities may not be available for traditional off-loading of USMC equipment by MPF ships. OMFTS is helping drive the creation of a new and improved MPF fleet, a concept known as MPF (Future).

The MPF (Future) concept will enable the USMC to conduct sea-based operations involving four capabilities, which the current MPF cannot meet: 1) at-sea phased arrival and assembly of Expeditionary Forces, 2) Expeditionary Strike Group Interoperability, 3) sea-based sustainment of Expeditionary Forces, and 4) at-sea reconstitution and redeployment of the Expeditionary Force.121

Figure 12 contains an artist’s rendition of a proposed MPF (F) ship depicting a significant aviation capability, as well as a depiction of a new requirement, the Integrated Landing Platform (ILP) Concept, which will allow a MPF (F) ship to off-load at sea to a Landing Craft Air-Cushioned (LCAC) vehicle.

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121 Program Executive Office Ships.
Figure 12. Artist’s Depiction of MPF (F) Ship and the ILP Concept\textsuperscript{122}

\textsuperscript{122} Ibid.
IV. A SURVEY OF LEGISLATIVE, TAX & REGULATORY ISSUES

A. EARLY 1980s ENVIRONMENT

The MPS/T-5 Deal resulted in a review of tax issues involved in long-term lease agreements entered into by US Government agencies. When conducting contracting matters, all Government agencies must know and adhere to the provisions in the Anti-Deficiency Act. This Act, codified in 31 U.S.C. 1341, prohibits authorizing or incurring obligations or expenditures in excess of amounts available in an appropriation or fund unless authorized by law.

When the Navy entered the MPS/T5 tanker leases, it agreed to leases that would cover a five-year base period, renewable at 5-year intervals, with substantial termination costs for failure to renew each ship’s contract. After the Navy entered the leases, it became concerned about the total amount it should record as a firm obligation in the Navy Industrial Fund (NIF) once the lease period started—which was a vital task given the NIF had limited working capital to support its activities. At this time, Congress became concerned about the adequacy of the Navy’s budget authority to cover the long-term obligations that would accrue from the leases. The GAO concluded that once the Navy agreed to commence the lease, it must record the leases as firm obligations in an amount sufficient to cover the lease payments for the five-year base period plus the gross termination expenses should the leases not be renewed at the end of the five years. If the NIF did not have an existing unobligated balance sufficient to cover these costs at the time of the delivery of the vessels, it would be in violation of the Anti-Deficiency Act.

Other tax issues that were considered in evaluating LvP options were the Lessor’s (i.e., Shipowner’s) special tax benefits, such as accelerated depreciation of the ship’s cost and deductions on interest payments, which lowered the Shipowner’s tax payments. The Shipowners passed these benefits to the Navy in the form of lower lease payments, thereby making the lease option more attractive.
In addition, certain economic assumptions were used in the absence of clear guidance: the Navy could acquire these ships without a large up-front obligation of procurement funds. No detailed or specific guidelines existed on how to conduct a LvP analysis in the early 1980s. Three specific items figured prominently into the Navy’s economic calculation to lease these vessels: tax revenue/loss to the Government, residual value, and the discount rate. In regard to tax revenue/loss, the Navy study reduced the total cost of the lease to the Government by the taxes that would be paid on interest income received by the lenders who financed a portion of the ship’s acquisition. In regard to ship residual value, the Navy study assumed that the vessels would have no residual value at the end of their 25-year leases.\(^\text{123}\) In regard to the discount rate, the Navy used the ten percent rate prescribed by the OMB. In general, the higher the discount rate, the more economical the leasing option becomes versus a purchase.

**B. Changes since 1982 & Current 2004 Environment**

Congress passed the *FY 1984 Department of Defense Authorization Act* (P.L. 98-94) in September 1983, which established a number of statutory conditions and requirements for entering into long-term leases. These requirements, which have since been codified in 10 U.S.C. 2401, increase Congressional control over certain lease decisions, make lease decisions more transparent, and provide for the development of more detailed guidelines for conducting LvP comparisons.\(^\text{124}\)

In general, U.S.C. 2401 requires that:

- DoD’s long-term leases or charters of vessels and aircraft, or leases or charters with substantial termination liabilities, be specifically authorized by law;
- Notice of intent to issue a solicitation for such a lease or charter be given to the Committees on Armed Services and on Appropriations of the Senate and House of Representatives;
- A detailed description of the terms of the lease and a justification for entering into the lease rather than purchase of the vessel be provided to Congress;

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123 Ibid, 8.

124 Ibid, 10.
• An analysis comparing the costs of leasing to those of purchasing be submitted to Congress with any request for authorization of such a lease;
• Such analysis be evaluated by OMB and the Treasury Department; and
• OMB and Treasury jointly issue guidelines for determining under what circumstances DoD may use lease arrangements rather than use direct procurement.125

These requirements, as listed in U.S.C. 2401, did not affect any lease or charter agreement entered prior to December 1, 1983, and, therefore, did not affect the acquisition of the MPS/T-5 vessels.

In 1984 the OMB and Treasury issued joint guidelines for DoD leases (Joint OMB and Treasury Guidelines to the Department of Defense Covering Lease or Charter Arrangements for Aircraft or Naval Vessels, published Oct. 31, 1984). These guidelines required that any special tax benefits conveyed to the Shipowner be added to the cost of a lease in a LVP analysis.126

The Deficit Reduction Act of 1984 (P.L. 98-369) modified tax laws and eliminated the benefits available to the owners of assets leased to Government entities. (Not retroactive to prior leases).127

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) (as subsequently amended in the Balanced Budget Act of 1997 (P.L. 105-33), which extended the discretionary spending caps to 2002), established statutory limits on Federal Government spending by creating spending caps on discretionary spending. To track progress against and compliance with budget enforcement requirements and spending caps, budget scorekeeping guidelines have been established for capital leases, lease-purchases, and operating leases. If the Navy desired to enter today a similar lease agreement as arranged in 1982, it has to request up-front budget authority for the

125 Ibid, 10.
126 Ibid, 12.
127 Ibid, 11.
estimated present value of the Government’s total estimated legal obligations over the life of the contract.\textsuperscript{128}

Additional guidance (\textit{Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs}, OMB Circular A-94, Oct. 29, 1992) was issued by OMB in 1992 to prevent \textit{LvP} analysis from understating the Government’s total cost of leasing. This guidance, applied Government-wide, prescribes that analysis (1) should add special tax benefits to the cost of leasing, and (2) should not subtract the normal payment of taxes on the lessor’s income derived from the leases from the total lease costs.\textsuperscript{129}

OMB Circular A-94 also addressed discount rate usage. It prescribed that \textit{LvP} analyses are to use discount rates that reflect the Treasury’s borrowing rate (OMB currently updates these rates annually). Lower discount rates make leasing \textit{less} attractive and higher discount rates make leasing \textit{more} attractive.

\textbf{C. \ OTHER FACTORS AFFECTING LEASING}

Aside from the Internal Revenue Service’s tax regulations and the historical and contemporary Congressional limitations imposed by our nation’s duly elected legislators, there are other reasons why leasing might be a better option than purchasing.

Leasing allows the Government to use an asset that has not yet been fully paid. This first option is desirable when funds are limited and there is a need to acquire additional assets above current procurement levels.

Second, leasing allows the Government to acquire an asset quicker than if it had to undergo a traditionally lengthy procurement process. In general, the procurement process tends to be slow, due in part to the occasional wrangling among legislators whose constituent loyalties impart a desire to make the procurement as politically beneficial as possible.

Third, leasing allows the Government to spread expenditures over a longer period, which frees additional current monies for other procurement.

\textsuperscript{128} Ibid, 11.
\textsuperscript{129} Ibid, 12.
In the MPS/T-5 ship acquisition, leasing allowed the ships to be built using approved commercial specifications rather than military specifications. This use resulted in minimal change orders, decreased work stoppages, and faster vessel completion times. Together, leasing resulted in greater cost savings over a purchase.

An expansion of other factors affecting leasing is discussed further in Chapter V: Leasing Recommendations.

D. GEOPOLITICAL SUCCESS

In the late 1970s, MSC needed to acquire additional vessels to fulfill its strategic sealift support mission. The post-Vietnam drawdown period found MSC using old WWII-era tankers to re-supply fuel to its many customers throughout the world. The maximum life expectancy for many of these vessels approached its end, which signaled MSC to modernize its fleet.

The turn of the decade also found the US in a renewed arms race with the Soviet Union. The Russian Navy strove to produce a large blue-water fleet to rival the US Navy. The Soviets worked diligently to construct aircraft carriers, cruisers, submarines, as well as long-range bombers for its Air Force, equipped with long-range anti-ship cruise missile capabilities to defeat the US Navy’s open sea hegemony.

US interests were in peril elsewhere as well. Instability in the Persian Gulf region, as implied by the overthrow of the Shah in Iran, the Soviet invasion of Afghanistan, and the resultant fuel cost crises to Americans, led the US to review its military capabilities and ability to meet these new threats. When Ronald Reagan assumed the Presidency in 1981, an impressive build-up of US military forces began, which included as a goal, a 600-ship Navy.

It was in this political environment that MSC hoped to acquire five T-5 Champion Class replacement tankers to maintain its global refueling responsibilities. It also found a need to acquire 13 cargo vessels with Lift-off/Lift-on (LO/LO) and Roll-on/Roll-off (RO/RO) capabilities to meet the requirements of a relatively new concept of operations: prepositioning USMC combat equipment at strategic port locations around the world. This new concept of operations was called the Maritime Preposition Force, which
evolved from a similarly titled Near Term Preposition Force established in the late 1970s at Diego Garcia in the Indian Ocean using older cargo vessels.

One can understand why MSC approached the acquisition of the MPS/T-5 vessels hoping to lease instead of purchase them—to do so would improve its chances of Congressional approval. However, the Democratic-controlled Congress in early 1980 was already busy dealing with the Republican Chief Executive’s other military proposals, especially the new and expensive Strategic Defense Initiative (SDI). The fact that acquiring merchant ships through leasing was a time-tested common practice made it reasonable for MSC to request permission to lease rather than purchase the 18 vessels.

One can reasonably argue that were it not for timely ship acquisition through the lease option—at that period in history—the US might have found itself in quite a different position in the world today. The money that Congress saved in the early 1980s by not purchasing the MPS/T-5 vessels was used to fund the expansion of the Navy’s capital fleet, research SDI, and increase the overall size of the US military. This focus helped maintain pressure on the Soviet Union to do the same, but due to an already strained economy, the Soviets were unable to compete, which, along with their internal strife, helped bring about its 1990 collapse.

As a result of the Deal, MPS and Sealift Tanker vessels were invaluable during major conflicts in the last decade of the twentieth and the first decade of the twenty-first centuries. The capabilities and strategic positioning of the MPF vessels ensured the US and allies’ success in Operations Desert Storm/Desert Shield in 1990-1991, and demonstrated the ability to launch a quick counter-offensive in the new Global War against Terrorism during Operation Enduring Freedom in Afghanistan in 2001 and Operation Iraqi Freedom in 2003.

E. FINANCIAL

In addition to the aforementioned geopolitical issues, the Government and other participants in the Deal realized other financial benefits:130

130 Argent Group Ltd. Memorandum on the Success of MPS and T-5 Programs. 22 May 1986.
• The Navy avoided up-front procurement costs associated with purchasing;

• By using approved commercial specifications rather than military specifications, the Navy allegedly saved over $35 million per vessel;

• Due to the Deal’s termination values, the investors were guaranteed their required rate of return, even if the Navy decided to purchase the vessels early in the lease phase;

• The Navy’s actual cost (i.e., the capital hire payments) were spread across the 25 or 20-year life span of the contract, freeing procurement dollars for high-priority items; and

• The 13 MPS vessels were delivered at an average cost of $177.9 million, for a total program savings of $79.8 million; the five T-5 tankers were delivered at an average cost of $65.7 million, for a total program savings of $1.7 million.
V. LEASING RECOMMENDATIONS

A. CAPITAL LEASING BY THE GOVERNMENT

The current political environment and prevailing attitude toward capital leases has slowly moved from positive to negative. During WWII, leasing was considered a viable method for temporarily procuring urgent assets. In 1972, the Navy entered into a capital lease for nine T-2 tankers, which created very little controversy. However, after the long-term MPS/T-5 leasing deal, Congressional attitude toward leasing turned predominately negative and resulted in legislation that makes long-term capital leasing virtually impossible.

While Congress has not provided official guidance on its opposition to capital leasing, our research suggests an anti-leasing bias. On the surface it would appear that Congress does not favor long-term leasing because it reduces its budgetary control. In a normal procurement process, Congress would authorize ship procurement and then appropriate 100 percent of the vessel’s construction funds. In a capital lease program, however, the money is paid annually from the Operations and Maintenance - Navy (OM&N) fund. While Congress does control the OM&N budget, it would have to factor the twenty years of future lease payments into that budget.

Leasing also reduces the lengthy approval and procurement process—a process that gives Congressional members decisive input to the program, especially if it does not favor their constituents. Capital leasing, however, does require approval from the Secretary of Defense and Congress, but the level of control is somewhat reduced when compared to the procurement process.

Another opponent to leasing lies in the vast community of DoD procurement specialists. The DoD spent millions of dollars and many years developing its corps of acquisition and contracting specialists. However, leasing virtually bypasses the whole acquisition process and requires only a few contract specialists. Thus, speculation dictates that the acquisition and contracting communities are protecting their job security
by not favoring leasing. This argument also raises the question as to why the DoD does not employ leasing specialists. Capital leases are currently treated on an ad hoc basis. Since no formal guidance exists on how to conduct a lease, the wheel must be reinvented each time a lease is considered.

Regardless of the bias that currently exists toward leasing, there are certain times when the DoD should strongly consider capital leases.

1. **When Mission Critical and No Funding**

Since the end of the cold war the military has consistently experienced tight budget constraints. During any budget year there are always requirements that go unfunded. When requirements do go unfunded, the question that should be asked is “How mission critical is the requirement?” If there is an urgent requirement that is mission critical then perhaps capital leasing is a viable option. Capital leasing allows the Government to receive and use assets immediately, provided they are available, and it allows them to spread the cash outlays over the lease period rather than front-loading 100 percent of the cost. Thus, leasing provides the Government with an extremely powerful tool: providing financing alternatives that normally would not be available.

2. **When Leasing Provides Advantages That Procurement Does Not**

The unique properties of leasing can provide advantages that could never be achieved through a normal procurement process. In a normal military procurement process, the requirements document spells out in great detail the operating characteristics and military specifications by which any piece of military equipment must be built. This review normally happens even before Congress approves or appropriates procurement funds. The military specifications often found in the requirements document are unique to the military because they generally require higher standards than commercially built items, and almost always cost more due to their unique features and requirements. In the case of military assets, which normally operate in harm’s way, building to military specifications can ensure survivability.

For MPS/T-5 vessels, their mission objective was to operate in a peaceful environment with the remote possibility of going into harm’s way. Thus, the need for
ships built to military specifications was not needed. However, the military’s requirements experience resides primarily in the area of military specifications. Thus, regardless of whether or not the ships needed to be built to military specifications, precedence would dictate military specifications as the standard.

In early 1982 when the MSC decided to lease the MPS/T-5 vessels rather than procuring them, it transferred MSC’s normal MPS/T-5 oversight role to ABS standards. ABS standards are used by private shipbuilding companies unless they are using military specifications, which tend to require higher standards than ABS. Thus, by building the ships to ABS standards and leasing them to the Government, cost savings were passed to the Government in the form of lower lease payments. However, if MSC had procured the vessels, they would have been built to military specifications as dictated in the requirements document, costing the military much more money.

Leasing also provides other advantages besides reduced expenditures. Since a commercial shipbuilding company built the vessels, the military was not allowed to intervene in the construction process. The shipbuilding company was under a tight contract where delays and design changes were not allowed. In fact, severe penalties would accompany late delivery of any vessel. These factors motivated the shipbuilder to stay on schedule and ensure on-time delivery.

In a normal military procurement where a ship is built to military specifications, there are often many delays and changes caused by military-initiated work order changes. These changes generally cost extra money and often place the project over-budget, which, in turn, increases Congressional oversight. While it is arguable whether military intervention in a project actually adds value, it is well known—in the Supply community at least—that military intervention and subsequent change orders raises costs, produces delays, and draws Congressional attention. Thus, the ability to avoid all these problems through leasing may be extremely beneficial in terms of cost, delivery, and mission.

3. When the Procurement Process Needs to be Bypassed

The procurement process certainly has its time and place in asset acquisition. When it comes to the acquisition of a major war-fighting platform such as the Joint Strike
Fighter, there is no better acquisition vehicle than the procurement process. The process itself ensures that the platform requirements and specifications are mission-essential. It also ensures the project is completely funded, and that Congress is fully aware at each stage of the program. The Joint Strike Fighter program began in late 1995 and was not awarded until April 2002. However, this award was a unique procurement to satisfy multiple mission needs by the aviation communities of several uniformed services.

There are times, however, when a lengthy procurement process is not merited. For example, leasing should be considered as a viable option when the requirement can be filled with a commercial off the shelf (COTS) application (e.g., computers). Since the COTS application has already been designed and built, the lengthy procurement process does not provide added value.

It is also advantageous to bypass the lengthy procurement process when the requirement is mission-essential and there is not sufficient time for an extended procurement process. Shortly after the terrorist events of 9-11, for example, there was a multitude of immediate security requirements. One viable option for fulfilling these requirements would have been capital leases that contained termination clauses. By using these financing vehicles, the Government could fulfill its requirements in a much shorter time and at reduced up-front outlays. If the requirements eventually become obsolete, the Government could terminate the lease and pay any applicable termination fees—although paying the termination value is, in effect, paying off the asset’s cost.

B. DESIRED LEGISLATIVE ENVIRONMENT

To understand the desired, or ideal, legislative environment for leasing, we must first review the legislation that facilitated the MPS/T-5 Deal. One of the first major issues was how to record the leases. In January 1983, the USCGEN issued a report that required the Navy, upon receipt of each ship, to record the ship’s total cost for the five-


year base period plus the termination value, as if terminated at the end of the five-year period. If this action had actually been implemented, the Navy would have obligated more money than it would have cost to purchase the ships.

In the end, to avoid violating the *Anti-Deficiency Act*, Congress enacted special legislation which allowed the Navy to proceed with the leasing arrangement in the absence of an appropriation to cover the five-year lease payments and total termination value. As a result, the Navy was only required to obligate one year’s worth of lease payments and ten percent of the ship’s termination value. In effect, Congress took on the complete risk for the MPS/T-5 Program. If circumstances called for early termination, Congress would have been required to appropriate the money and pay any remaining costs.

1. **Pay & Record as You Go**

One of the benefits of leasing in the commercial world is the ability to pay for the use of your leased equipment as you use it. If the user of equipment was required to pay 100 percent of the lease before he used the equipment, then there would be no reason to lease. Instead, he would purchase the equipment with his own or borrowed funds. The same concept applies to the Government. If the Government requires its agencies to obligate the total payments for the first option period plus the termination value—which virtually equals or exceeds the cost of the total lease—then it will never make financial sense to lease. Thus, in order to make leasing a viable option for the Government, special legislation needs to be passed that frames leasing as an annual obligation, allowing the Government to make lease payment over the life of the contract.

2. **Allow Accelerated Cost Recovery System Depreciation**

The *Economic Recovery Act of 1981* allowed companies to realize their depreciation tax benefits over an accelerated time period. This program, the Accelerated Cost Recovery System, allowed the Equity Owners of the MPS/T-5 vessels to completely depreciate their ships over a five-year period even though the vessels’ lives were 20 to 25 years. The advantage to the Equity Owners was that their taxable income in the early
years of the lease was lower than if the vessels had been depreciated over their service life, which lowered their tax bill to the IRS in the lease’s early years.

In 1984, Congress passed the Deficit Reduction Act (P.L. 98-369), which modified tax laws and removed the ability for the Equity Owners to use the ACRS with respect to assets leased to tax-exempt entities such as the Government. The Legislation reduced the impact of tax benefits by lengthening the period for tax depreciation to a period equal to 125 percent of the lease term. While this Legislation was not retroactive, if the MPS vessels had been built after 1984, the depreciation would have been spread equally over 31.25 years. Thus, any future leases by the Government would not be able to benefit from the favorable net present value benefits of the five-year depreciation.

The Deficit Reduction Act of 1984 (P.L. 98-369) actually discourages future Equity Owners from entering into a ship leasing arrangement, since it reduces their tax benefits. Thus, if the military hopes to foster an environment where equity owners desire to lease to the military, Congress needs to re-institute the ability for equity owners to take accelerated depreciation over shorter time periods.

3. Allow Investment Tax Credit

In 1962 the IRS provided American businesses with the Investment Tax Credit in order to encourage the purchase of machinery and equipment, which would, in turn, stimulate the economy. The ITC, which began at seven percent, was removed, and later reinstated at ten percent, allowed businesses to deduct, as a credit against its Federal income tax liability, up to ten percent of qualifying investments in tangible personal property. If the MPS/T-5 Equity Owners were allowed the ITC, a portion of the tax savings could be passed to the Navy in the form of lower lease payments.

If the military is to lease from a private entity, tax laws need to be changed allowing the same tax incentives for private entities leasing to the Government. In the absence of tax incentives, private companies will either not be able to make enough profit to do business with the Government, or private companies will charge a price above the military’s strike price. In either case, both parties lose and, thus, need the tax benefits to incentivize investment spending.
4. Re-Think Restrictive Leasing Legislation

Two of the most devastating pieces of legislation regarding leasing are the 1984 Department of Defense Authorization Act (P.L. 98-94) and the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177). While the loss of the ACRS for depreciation disincentivized private entities from leasing to the Government, the passage of both Acts made leasing virtually impossible. The Balanced Budget and Emergency Deficit Control Act of 1985 was passed to give Congress the ability to track progress against authorized spending. It resulted in all DoD components being required to request up-front budget authority for the estimated present value of all capital lease payments. Thus, Congress would now have to either appropriate the total obligation for the life of the lease or it would have to pass special legislation authorizing funding for the lease.

The 1984 Department of Defense Authorization Act further restricted Government leasing by requiring all long-term leases with substantial termination values to be specifically authorized by law. It further required special notification be given to Congress prior to issuing a solicitation for leasing and, in addition, required that a detailed description of the lease and justification for leasing be provided. Finally, the Act required a Lvp cost comparison be submitted to Congress after OMB and the Treasury Department’s review and evaluation.

In essence, these two public laws make the red-tape quagmire so thick that it is nearly impossible for leasing to be an effective alternative to purchasing—which forces DoD agencies to use the procurement method for asset acquisition. Unfortunately, Congress and OMB are not convinced that leasing can be used as a viable financing tool for Federal assets. The enactment of so many rules and regulations makes the leasing alternative too difficult. At a minimum, leasing should be recognized as a workable option, allowing exploration of future leasing opportunities. The first step in this process, however, is to re-think “Anti-Leasing” legislation.
C. OTHER LVP CONSIDERATIONS: AN AGL, JCT AND HKM COMPARISON

1. Tax Impact to the Treasury

As previously discussed in Chapter III and summarized in Table 6, there are three main controversies in the LvP decision: tax benefits, discount rate and residual value. AGL (pro-lease) and JCT (pro-purchase) disagreed on how best to deal with all three, but the chief argument (and, consequently, the one having the greatest financial impact) lies in how to reconcile the tax benefits. Specifically, how do taxes impact the US Treasury on a NTCG basis? Table 11 provides a detailed summary that focuses strictly on the NTCG issue. Included in Table 11 is our analysis (the HKM column), which agrees and disagrees with areas in both AGL’s and JCT’s arguments. (Numbers in parentheses are net cash outflows from the Treasury).
Table 11. LvP Summary of Tax Effects on a Net Total Cost to the Government Basis (Post-TEFRA and No ITC)\textsuperscript{133}

(millions $)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PURCHASE</th>
<th>CHARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AGL</td>
<td>JCT</td>
</tr>
<tr>
<td>Ship cost</td>
<td>(182.4)</td>
<td>-</td>
</tr>
<tr>
<td>Tax revenue on Government debt used to finance the purchase\textsuperscript{134}</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Total cost of purchase</td>
<td>(179.9)</td>
<td>-</td>
</tr>
<tr>
<td>Present value of Capital Hire payments paid by the Navy</td>
<td>-</td>
<td>(135.1)</td>
</tr>
<tr>
<td>Tax Revenue on Capital Hire payments (revenue to Lessor equals taxes at 46%)</td>
<td>-</td>
<td>39.7</td>
</tr>
<tr>
<td>Interest component\textsuperscript{135}</td>
<td>-</td>
<td>39.7</td>
</tr>
<tr>
<td>Return of capital component</td>
<td>22.0</td>
<td>22.0</td>
</tr>
</tbody>
</table>

\textsuperscript{133} Data collected from AGL, JCT and authors' own analyses. See Notes 69 and 87 for source documents. All values discounted at 10.25% (5% compounded semi-annually).

\textsuperscript{134} Assumes purchase made using 21% Treasury debt financing for a borrower in the 13.5% tax bracket (as opposed to a 46% lease debt rate). \([0.21 * (0.135 / 0.46)] = 0.21 * .293 = 0.062\) or 6.2%.
Assuming interest payments paid by the Navy are $39.7 million (see page 20 of Note 69 and page 4 of Note 87): 0.062 \* $39.7 million = $2.5 million.

\textsuperscript{135} JCT’s argument implies that without the Deal the investor will place his money elsewhere in a taxable investment, thus, the tax revenue is not incremental. See pages 18 and 19 of Note 69.
Residual value payments at termination (assumes 20% residual value, net of tax)

- (1.7) (1.7) (1.7)

Lost tax revenue from amortization deduction

- (0.7) (0.7) (0.7)

Lost tax revenue from depreciation deduction

- (72.4) (72.4) -

Total present value cost

(179.9) (148.2) (187.9) (115.5)

Ship purchase price

179.9 179.9 179.9 179.9

Benefit (Cost) to Lease versus Purchase

0 31.7 (8.0) 64.4

As illustrated in Table 11, the total cost difference between HKM and AGL is $32.7 million. However, the largest difference, $72.4 million, occurs between HKM and JCT.

2. AGL, JCT and HKM NTCG Methodology Reconciliation

Differences between the AGL, JCT and HKM analyses are explained below:

- Ship Purchase Cost

  - AGL: Vessel cost is $182.4 million. Value calculated using actual cost data as stipulated in the firm contract offers and represents the average cost of the 13 MPS vessels.

136 Schedule 5 of AGL’s Analysis of the Report by the Staff of the Joint Committee on Taxation Regarding Tax Aspects of the TAKX Maritime Prepositioning Ship Program and Other Concerns lists the ACRS tax benefit as a $77.7 million Treasury outflow. This schedule, however, does not take into consideration the $5.3 million ITC loss, since the IRS ruling came after AGL’s report was published. HKM used Note 42 and Tables 1 and 2 of AGL’s report (see Note 87) to determine the $5.3 million NTCG impact of the lost ITC. ($77.7 million - $5.3 million) = $72.4 million.

137 AGL’s, JCT’s and HKM’s ship purchase prices differ by no more than plus or minus $5 million. Actual calculated purchase prices were $182.4 million (AGL), $178.2 million (JCT), and $179.9 million (HKM). HKM used $179.9 million as a baseline for comparison purposes. Further explanation provided in Section V.C.2. See also page A-11 of Note 87 and Note 133.
o JCT: Vessel cost is $178.2 million. JCT did not include the additional $4.2 million in legal and other fees that were paid by the Lessor for arranging the lease.

o HKM: Vessel cost is $182.4 million. HKM concurs with AGL’s $182.4 million baseline purchase cost, which includes the $4.2 million in legal and other fees. HKM assumes the vessels were purchased using 21 percent Treasury debt financing from a borrower in a 13.5 percent tax bracket (as opposed to a 46 percent lease debt rate). The subsequent tax rate is given by:

\[
[0.21 \times \left(\frac{0.135}{0.46}\right)] = 0.21 \times 0.293 = 0.062 \text{ or } 6.2\%
\]

Assuming interest payments paid by the Navy are $39.7 million as Schedule 5 of AGL’s analysis indicates,\(^{138}\) the resultant tax revenue generated by 21 percent Treasury debt financing is:

\[
0.062 \times 39.7 \text{ million} = \text{2.5 million}
\]

- Interest Component of the Tax Revenue on Capital Hire Payments
  - AGL: Value is a $39.7 million Treasury inflow. Assumes taxes on interest income paid by the Lender to the Treasury from the debt portion of the lease.\(^ {139}\)
  - JCT: No value. JCT concluded that it was unnecessary to count income taxes paid by the Lender to the Treasury since counting the cash inflows from the

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\(^{139}\) Ibid, 5.
debt portion of the lease would require that similar Treasury inflows from debt used to finance the lease also be counted.\textsuperscript{140}

- HKM: No value. Without the Deal, the investor will go elsewhere to investments where interest income is taxable, so tax revenue is \textit{not} incremental, and, thus, not counted.

- Lost Tax Revenue from Depreciation Deduction
  - AGL: Value is $72.4 million ($77.7 million less $5.3 million ITC loss). This value represents the Treasury’s lost revenue as a result of the Lessor’s use of the Deal’s ACRS tax benefit.
  - JCT: Same argument as AGL.
  - HKM: No value. A finite pool of leveraged lease investments exists, which limits not only the amount of money that can be invested in this type of transaction, but also the number of people sophisticated enough to take advantage of the Deal. Regardless of whether the Deal existed or not, leveraged lease investors will seek tax shelters for their money. Therefore, the Treasury’s lost tax revenue occurs either way and, thus, is not considered. The end result is an “add-back” of AGL’s and JCT’s $72.4 million tax revenue loss, which makes leasing $72.4 million more attractive.

- Benefit (Cost) to Lease Versus Purchase
  - AGL: The NPV to lease is $148.2 million, making leasing $31.7 million more cost effective than the $179.9 million purchase price.
  - JCT: The NPV to lease is $187.9 million, making leasing $8 million less cost effective than purchasing.

\textsuperscript{140} Ibid.
HKM: The NPV to lease is $115.5 million, making leasing $64.4 million more cost effective than purchasing. The availability of such a large cost savings is significant even in today’s historically low interest rates (recall that the lower the interest rates, the less cost savings realized by a lease over a purchase). Leasing can still be more cost effective if given sufficient legislative and political support.

3. **HKM View on Leveraged Lease Investments**

Long-term capital lease structures are extremely complex, with only a few “players” who truly understand how deals such as the MPS/T-5 Program work, and who have large sums of investment capital available for these transactions. Given the exclusivity of this “Tax-Sheltered Lease Pool,” only a few investors are available and sophisticated enough to understand the deal’s risks and returns. When this Pool reaches its limit, there are no other lease deals in which to invest. Thus, supply and demand are limited to the current level of available lease deals.

In 1982, the Pool was “full” when the $2.65 billion MPS/T-5 tanker deal became available. As a result, it displaced the Pool’s least attractive leasing arrangement. This displacement occurred because the Deal was backed by the superior credit of the US Government, which gave investors a guaranteed 11.745 percent after-tax return on a “hell or high water” basis.141

The money for the displaced lease deal would not likely go to a taxable investment, as suggested by JCT, since the investor’s intent was to tax shelter his money through products that provide significant tax benefits (as the MPS/T-5 Deal did). Based on this intent, the displaced investor would most likely seek other tax-sheltered investments such as municipal bonds. Accordingly, the Treasury would not realize revenue on income earned from the investor’s subsequent tax-free investment, and, in addition, would not lose tax revenue from the finite Pool of lease deals since the tax loss created by these investments would already be deducted and, thus, would not be incremental in the LvP decision.

141 See page 26 under “Time Charter” for an understanding of “hell or high water” returns.
D. PROJECT SUMMARY & CONCLUSIONS

In conclusion, the 1982 decision by the United States Navy to lease thirteen T-AKX class Maritime Prepositioning Ships and five Champion Class T-5 replacement tankers has been thoroughly examined. The laws and regulations that were in place at the time of the lease and the cost comparison between the LVP decision have been evaluated. In addition, this research project investigated the role played by Argent Group Ltd., the financial advisor hired by the Navy for the purpose of overseeing and providing financial guidance throughout the MPS/T-5 Program.

With regard to whether leasing is more cost effective than purchasing, the answer largely rests on the degree of legislative and political support and the set of assumptions used for the discount rate, the residual value, and the tax benefits received. In the early 1980s, an argument could be made that the different parties involved in preparing cost comparisons chose assumptions that favored their desired outcome. However, due to subsequent Congressional legislation that changed these assumptions and removed their flexibility, the MPS/T-5 Program would be evaluated as more expensive to lease than purchase in today’s environment.

Clearly, the Navy chose the leasing option in the early 1980s because it needed to capitalize the war-fighting fleet rather than fund non-combatant support vessels. When the Military Sealift Command realized a funding shortage might jeopardize the MPS/T-5 vessels the natural decision was to find an alternate method for funding these requirements. Leasing provided that alternative. However, Congress’s leasing inexperience coupled with a lack of governing legislation eventually allowed the leases to occur.

While capital leasing could have a future, the current legislative and political environment would have to drastically change to embrace it. Many laws would need to be re-thought so equity owners receive tax benefits to incentivize their capital investment. The trade off would be the Government’s ability to spread its payments over the useful life of the leased asset. Furthermore, capital leasing would allow the military to bypass a lengthy procurement process, which could result in it receiving assets sooner. Capital
leasing also allows the Government to obtain assets that would otherwise have never been procured due to budget constraints.

E. DIRECTION FOR FUTURE RESEARCH

An area this project has not addressed is the trade-off between using a more cost effective but lengthier buying process versus a shorter but more expensive leasing one. While the two processes can be compared quantitatively using their monetary values, it is extremely difficult to compare the qualitative advantages of bypassing the procurement process and receiving an asset sooner than the procurement process could have delivered it. Thus, a set of qualitative metrics needs to be developed to determine when long-term leasing should be used rather than procurement. This measure could then be combined with the quantitative monetary measures to determine the correct course for obtaining military assets.

The area of Net Total Cost of Government Ownership should also be considered for future research. Research would determine if there is a difference between capital leasing and procurement in the total cost of Government ownership and determine any realizable savings. The findings could be used as another factor in evaluating the LVP decision.

Another area for future research centers on the use of COTS products verses items unique only to the military. COTS items are generally less expensive, more readily available, and can be delivered sooner. Thus, research to determine if COTS items provide a cost savings in long-term leasing arrangements is warranted.
APPENDIX A

CAPABILITIES OF THE LEASED SHIPS

T-5 Tankers (5):
General comments on the five T-5 Tankers:

- All were built by American SB Co, Tampa, FL
- Commissioned dates:
  - MV Gus W. Darnell (T-AOT 1121): 11 SEP 1985
  - USNS Paul Buck (T-AOT 1122): 07 JUN 1985
  - USNS Samuel L. Cobb (T-AOT 1123): 15 NOV 1985
  - USNS Richard G. Matthiesen (T-AOT 1124): 18 FEB 1986
  - USNS Lawrence H. Gianella (T-AOT 1125): 22 APR 1986
- Displacement, tons: 39,624 full load.
- Dimensions, feet (meters): 615 x 90 x 36 (187.5 x 27.4 x 10.8).
- Main machinery: 1 Sulzer 5RTA76 diesel; 18,400 hp (m) (13.52 MW) sustained; 1 shaft.
- Compliment (generally): 23 (9 officers).
- Cargo capacity: 238,400 barrels of oil.
- Comment: Built for Ocean Carriers Inc, Houston, Texas specifically for long-term charter to the Military Sealift Command (20 years) as Ocean Transportation ships. The last two (Matthiesen & Gianella) are able to rig underway replenish gear.
- Sources:
  Military Sealift Command. MSC Ship Inventory. Sealift.

Maritime Preposition Ships (13):
General comments on the five Maritime Preposition Ships:

The Maersk Line operates the following five ships for the MPS:
- MV PFC William B. Baugh (T-AK 3001) – MPSRON 1 / commissioned: 30 OCT 1984
- MV 1ST LT Alex Bonnyman (T-AK 3003) – MPSRON 3 / commissioned: 26 SEP 1985
- MV PVT Franklin J. Phillips (T-AK 3004) – MPSRON 2 / commissioned: 12 SEP 1985

Comments:
- Odense Staalskibsvaerft, Lindo, Denmark, built all. (Bethlehem Steel at Sparrows Point, Maryland converted Hague, Anderson and Phillips. Baugh and Bonnyman were converted at Beaumont, Texas).
- Main machinery: One Sulzer 7RND 76M, 7-cylinder diesel; 16,800 bhp bow thruster; one shaft.
• Compliment (generally): 20 contract mariners, 7 MSC crew + 30 maintenance crew + 80 troops.
• Cargo capacity: 23,000 tons maximum.
• Each ship carries one fifth of the vehicles, equipment, and supplies to outfit a Marine Expeditionary Brigade (MEB). Transport up to 413 containers (280 ammunition, 86 general cargo, 23 drummed fuel, 24 refrigerated), plus providing 11,369m² vehicle cargo space. There are four 30-ton and two 36-ton pedestal cranes, side-loading vehicle ports amidships (with portable 13.7 – or 27.4m ramps), and a 66-long-ton-capacity, 32m long, 4.9m wide Navire slewing ramp aft beneath a helicopter deck. There are eight cargo hatches and three vehicle-parking decks. Liquid cargo includes 4,920m³ of transferable vehicle fuel, 504m³ of potable water, and 2,252m³ of lube oil.
• Phillips serves as the Flagship of MPSRON 2, carrying an eight-man navy communications team and equipment for the 7th MEB, Twenty-Nine Palms, California.

Sources:


The Waterman Line operates the following three ships for the MPS:
• SS SGT Matej Kocak (T-AK 3005) – MPSRON 2 / commissioned: 05 OCT 1984
• SS PFC Eugene A. Obregon (T-AK 3006) – MPSRON 1 / commissioned: 15 JAN 1985
• SS MAJ Stephen W. Pless (T-AK 3007) – MPSRON 3 / commissioned: 01 MAY 1985

Comments:
• All were built by Sun SB, Chester, PA (converted by National Steel and SB, San Diego, CA).
• Main machinery: Two sets General Electric-geared steam turbines; one 6-bladed propeller; 32,000 shp thruster; one shaft.
• Compliment (generally): 85 contract mariners, 7 MSC crew, 8 navy + 25 maintenance crew.
• Cargo capacity: 25,000 tons maximum.
• Each ship is intended to transport one fourth of the vehicles, fuel, supplies, and provisions to support the MEB. In the forward three holds, they can carry 213 ammunition, 150 “Lo/Lo,” 10 general cargo, 32 drummed-fuel, and 32 refrigerated containers. The remainder of the cargo consists of a large number of vehicles and cargo, fuel, and water. These ships were lengthened 39.8m during conversion, and a helicopter deck and ramp was added. They have paired 50-ton and paired 35-ton portal cranes and retain a 30-ton capacity traveling gantry forward to handle containerized cargo. The articulating stern ramp can support up to 200 tons and is 40.8m long. There is a 65-ton capacity, 13.6 x 4.4m internal vehicle elevator.

Sources:


The American Overseas Corporation (a subsidiary of General Dynamics) operates the following five ships for MPS:
• MV 2ND LT John P. Bobo (T-AK 3008) – MPSRON 1 / commissioned: 14 APR 1985
• MV PFC Dewayne T. Williams (T-AK 3009) – MPSRON 1 / commissioned: 06 JUN 1985
• MV 1ST LT Baldomero Lopez (T-AK 3010) – MPSRON 2 / commissioned: 21 NOV 1985
MV 1ST LT Jack Lummus (T-AK 3011) – MPSRON 3 / commissioned: 06 MAR 1986
MV SGT William R. Button (T-AK 3012) – MPSRON 2 / commissioned: 22 MAY 1986

Comments:
- All were built by General Dynamics, Quincy, Massachusetts
- Main machinery: Two Stork Werkspoor 18TM410V diesels; one propeller; 26,400 bhp thruster; 1,000-shp bow-thruster
- Compliment (generally): 30 contract mariners, 7 MSC crew, 7 navy + 25 vehicle maintenance personnel
- Cargo capacity: 25,384 tons maximum
- Each ship can carry up to 522 standard 20ft. vans (350 for ammunition, 110 for general stores, 30 for fuel drums, and 32 refrigerated), plus 14,000m² of roll-on/roll-off vehicle capacity to carry up to 1,400 vehicles. A 66-long-ton capacity, 32m-long, 4.9m-wide Navire stern slewning ramp provides access to the six vehicle decks and can discharge either vehicles to a pier or amphibious vehicles of up to 23 tons directly into the water, the stern door measures 11 x 4.55m. The upper deck can stow two LCM (8) landing craft, six unpowered causeway sections, four powered causeway sections, a warping tug, four pipe trailers, and 16 hose reels. Carry 5,764.6m³ (1,523,000 Gallons) of transferable bulk fuel, plus 2,039 55-gallon fuel drums. Each ship can also transport 307m³ of potable water. Five 39-ton pedestal cranes are fitted, with two sets being paired, and there is a large helicopter deck at the stern. Unloading rates: all vehicles and cargo at a pier in 12 hours; all cargo at a pier in 3 days; all cargo while moored out in 5 days. There is a four-point mooring system. In addition to those for the listed personnel, there are 102 temporary berths for vehicle crews.

Sources:

Maritime Preposition Ship Squadrons (3):
General comments on Maritime Preposition Ship Squadrons:

There are three MPS Squadrons (MPSRON) logistically located at forward deployed areas around the world:
- MPSRON 1 operates out of the Mediterranean Sea / eastern Atlantic Ocean. It carries equipment for the 6th Marine Expeditionary Brigade, Camp Lejeune, North Carolina.
- MPSRON 2 operates out of Diego Garcia (British Indian Ocean Territory). It carries equipment for the 7th Marine Expeditionary Brigade, Twenty-Nine Palms, California.
- MPSRON 3 operates out of Guam / Saipan in the western Pacific Ocean. It carries equipment for the 1st Marine Expeditionary Brigade, Kaneohe Bay, Oahu, Hawaii.
SHIPS ACQUIRED IN THE LEASE AGREEMENT:

MV Gus W. Darnell (T-AOT 1121) – Long-term Chartered Tanker
  Length: 615 ft
  Beam: 90 ft
  Draft: 36 ft
  Displacement: 39,624 long tons
  Speed: 16 kts
  Civilian: 24

Source:
Military Sealift Command. MSC Ship Inventory. Sealift Ships. Gus W. Darnell, MV.

MV Gus W. Darnell

USNS Paul Buck (T-AOT 1122) – Government-owned Tanker
  Length: 615 ft
  Beam: 90 ft
  Draft: 36 ft
  Displacement: 39,624 long tons
  Speed: 16 kts
  Civilian: 24

Source:
Military Sealift Command. MSC Ship Inventory. Sealift Ships. Paul Buck, USNS.
USNS Paul Buck

USNS Samuel L. Cobb (T-AOT 1123) – Government-owned Tanker
- Length: 615 ft
- Beam: 90 ft
- Draft: 36 ft
- Displacement: 41,500 long tons
- Speed: 16 kts
- Civilian: 24

Source:
USNS Richard G. Matthiesen

USNS Lawrence H. Gianella (T-AOT 1125) – Government-owned Tanker
Length: 615 ft
Beam: 90 ft
Draft: 36 ft
Displacement: 39,624 long tons
Speed: 16 kts
Civilian: 24

Source:
Military Sealift Command. MSC Ship Inventory. Sealift Ships. Lawrence H. Gianella, USNS.
MV CPL Louis J. Hague Jr. (T-AK 3000) – Container & Roll-on/Roll-off Ship
Length: 755 ft 5 in
Beam: 90 ft
Draft: 32 ft 10 in
Displacement: 44,088 long tons
Speed: 16.4 kts
Squadron: MPSRON 3
Civilian: 25
Military: 11
Source:

MV PFC William B. Baugh (T-AK 3001) – Container & Roll-on/Roll-off Ship
Length: 755 ft 5 in
Beam: 90 ft
Draft: 32 ft 10 in
Displacement: 44,088 long tons
Speed: 16.4 kts
Squadron: MPSRON 1
Civilian: 25
Source:
MV PFC William B. Baugh

MV PFC James Anderson Jr. (T-AK 3002) – Container & Roll-on/Roll-off Ship
Length: 755 ft 5 in
Beam: 90 ft
Draft: 32 ft 10 in
Displacement: 44,088 long tons
Speed: 16.4 kts
Squadron: MPSRON 3
Civilian: 25

Source:
MV 1ST LT Alex Bonnyman (T-AK 3003) – Container & Roll-on/Roll-off Ship
Length: 755 ft 5 in
Beam: 90 ft 1 in
Draft: 32 ft 10 in
Displacement: 44,088 long tons
Speed: 16.4 kts
Squadron: MPSRON 3
Civilian: 25
Military: 3
Source:
Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV 1ST LT Alex Bonnyman.

MV 1ST LT Alex Bonnyman

MV PVT Franklin J. Phillips (T-AK 3004) – Container & Roll-on/Roll-off Ship
Length: 755 ft 5 in
Beam: 90 ft
Draft: 32 ft 10 in
Displacement: 44,088 long tons
Speed: 16.4 kts
Squadron: MPSRON 2
Civilian: 25
Source:
Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV PVT Franklin J. Phillips.
SS SGT Matej Kocak (T-AK 3005) – Container & Roll-on/Roll-off Ship
Length: 821 ft
Beam: 105 ft 8 in
Draft: 34 ft
Displacement: 51,612 long tons
Speed: 20 kts
Squadron: MPSRON 2
Civilian: 26

Source:
Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, SS SGT Matej Kocak.

SS PFC Eugene A. Obregon (T-AK 3006) – Container & Roll-on/Roll-off Ship
Length: 821 ft
Beam: 105 ft 8 in
Draft: 34 ft
Displacement: 51,612 long tons
Speed: 20 kts
Squadron: MPSRON 1
Civilian: 26
Source:

SS PFC Eugene A. Obregon

SS MAJ Stephen W. Pless (T-AK 3007) – Container & Roll-on/Roll-off Ship
Length: 821 ft
Beam: 105 ft 8 in
Draft: 34 ft
Displacement: 51,612 long tons
Speed: 20 kts
Squadron: MPSRON 3
Civilian: 26

Source:

SS MAJ Stephen W. Pless
MV 2<sup>ND</sup> LT John P. Bobo (T-AK 3008) – Container & Roll-on/Roll-off Ship

- Length: 673 ft 2 in
- Beam: 105 ft 6 in
- Draft: 33 ft
- Displacement: 46,111 long tons
- Speed: 17.7 kts
- Squadron: MPSRON 1
- Civilian: 29
- Military: 8

Source:

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MV PFC Dewayne T. Williams (T-AK 3009) – Container & Roll-on/Roll-off Ship

- Length: 673 ft 2 in
- Beam: 105 ft 6 in
- Draft: 33 ft
- Displacement: 46,111 long tons
- Speed: 17.7 kts
- Squadron: MPSRON 1
- Civilian: 29

Source:
MV 1ST LT Baldomero Lopez (T-AK 3010) – Container & Roll-on/Roll-off Ship
Length: 673 ft 2 in
Beam: 105 ft 6 in
Draft: 33 ft
Displacement: 46,111 long tons
Speed: 17.7 kts
Squadron: MPSRON 2
Civilian: 29

Source:
Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV 1ST LT Baldomero Lopez.

MV 1ST LT Jack Lummus (T-AK 3011) – Container & Roll-on/Roll-off Ship
Length: 673 ft 2 in
Beam: 105 ft 6 in
Draft: 33 ft
Displacement: 46,111 long tons
Speed: 17.7 kts
Squadron: MPSRON 3
Civilian: 29
Military: 8

MV PFC Dewayne T. Williams
MV 1\textsuperscript{ST} LT Jack Lummus

MV SGT William R. Button (T-AK 3012) – Container & Roll-on/Roll-off Ship

- Length: 673 ft 2 in
- Beam: 105 ft 6 in
- Draft: 33 ft
- Displacement: 46,111 long tons
- Speed: 17.7 kts
- Squadron: MPSRON 2
- Civilian: 29

Source:

MV SGT William R. Button
APPENDIX B

CHRONOLOGY OF SIGNIFICANT EVENTS IN THE MPS/T-5 LEASE VERSUS PURCHASE HISTORY

Note: The reference for all quotes found in this chronology can be sourced to footnotes in their applicable subject chapter.

Pre-1900

1870 – The first Anti-Deficiency Act (R.S. 3679) passed. It prohibited the commingling of current appropriations and the diversion of old appropriations to purposes for which they were not intended.

1900-1969

1905 – An amendment to the Anti-Deficiency Act passed. This amendment revised the law to state that all "obligations," rather than all contracts, were prohibited unless adequate appropriations were available. The Act was further amended in 1906 and 1950.

1917 – The Jones Act passed. The Act required that all cargo, including oil products moved between US ports, be 1) carried in ships manufactured in the US, 2) owned 75 percent by US parties, and 3) crewed by American citizens.

1962 – The Internal Revenue Service provided American businesses with an investment tax credit in order to encourage the purchase of machinery and equipment to stimulate the economy.
1970-1979

June 20, 1972 – The Navy entered into a lease agreement for the charter of nine T-2 replacement tankers to replace 14 WWII-vintage T-2 tankers.


1980-1989

September 8, 1980 – TAKX ships authorized by Congress.

1981 – The Economic Recovery Act of 1981 passed. This Act initiated the Accelerated Cost Recovery System (ACRS), which allowed companies to accelerate their depreciation over a shorter than normal period of time.

October 14, 1981 – Naval Sea Systems Command issued Request For Proposal No. N00024-82-R-2051 TAKX Maritime Prepositioning Ships, which requested proposals to either purchase or charter 12 to 15 TAKX Maritime Prepositioning Ships.

November 1981 – Navy and DoD personnel conducted an informal meeting with IRS personnel regarding the impending lease of the TAKX and T-5 ships. No binding decisions were made.

December 8, 1981 – Deputy Secretary of Defense approved the convert and charter program for inclusion in the fiscal year 1983 budget with the concurrence of OMB.

December 1981 – Office of Secretary of Defense and the Secretary of the Navy approved the use of charter rather than purchase.

**January 11, 1982** – MSC issued RFP No. N00033-82-R-7002 for the charter of five T-5 replacement tankers to replace five WWII-vintage T-5 tankers.

**January 1982** – Technical offers received from ten offerors under the TAKX RFP.

**February 11, 1982** – Coopers and Lybrand, a “Big 8” accounting firm hired by the Navy to analyze the lease versus purchase decision, completed its study.

**February 22, 1982** – MSC issued RFP No. N00033-82-R-0532, which requested a proposal for 2,000 hours of financial advisory services to effectively evaluate the financial aspects of all proposals being submitted on both the MPS and T-5 RFPs.

**March 1982** – Price proposals received by NAVSEA on TAKX RFP.

**March 28, 1982** – Secretary of the Navy John Lehman sent a letter to the House Appropriations Committee, which stated that the Navy intended to maintain its policies in support of the American Merchant Marine and the American Shipbuilding Industry.

**April 5 1982** – Argent Group Ltd. awarded the contract to act as Financial Advisor to MSC.

**May 1982** – Initial offers received from nine offerors under T-5 tanker RFP.

**July 1982** – Argent submitted initial reports on the relative financing costs of the charter and purchase.
**July 20 1982** – Defense Subcommittee Chairman of the House Appropriations Committee J. Addabbo stated in a letter to the SECNAV that the Navy’s original plans called for procurement of new and converted ships; the fiscal year 1982 Budget Amendment changed it to a charter arrangement. He also directed the Navy not to enter into any contractual agreements with respect to the Deal until Congress reviewed the Investigative Staff’s Lvp analysis of present value costs to the Government.

**July 30 1982** – SECNAV agreed to “withhold any firm contractual arrangements” until Congress could review the Deal.

**August 17, 1982** – Conditional TAKX awards made to Maersk (3 ships firm + 2 option for FY-83), Waterman (1 ship firm + 2 option for FY-83), General Dynamics (2 ships firm + 3 option for FY-83). Congress advised.

**August 18, 1982** – Public notified of contract award and amount.

**August 19, 1982** – AGL submitted supplemental report on the TAKX MPS Program. Using actual cost data as stipulated in the firm contract offer, AGL concluded that the Navy’s present value cost to charter the TAKX vessels were $140.56 million per vessel, compared to a purchase cost of $184.01 million.

**September 1, 1982** – Surveys and Investigations Report submitted to the House Appropriations Committee. The report concluded that “using present value (PV) analysis and the OMB directed 10 percent PV discount rate, leasing the TAKX vessels was advantageous to the Navy and the Government at all long-term interest rates less than 18-19 percent.”

**September 14, 1982** – Senate Armed Services Committee Chairman John Tower wrote to SECNAV and stated that the Navy was in compliance with Section 303 of the FY-83 Authorization Act and approved the Navy’s pursuit of the TAKX vessels.
September 16, 1982 – Defense Subcommittee Chairman of the House Appropriations Committee J. Addabbo wrote to SECNAV to inform him that the Defense Subcommittee of the House Appropriations Committee agreed, based on the S&I Report, that leasing the TAKX vessels was the better option.

September 17, 1982 – House Subcommittee on Readiness held a hearing on the TAKX Program. During this hearing, the following opinions were expressed:

- Assistant SECNAV (Shipbuilding & Logistics) G. Sawyer stated that annual capital charter costs would be $14.95 million based on anticipated interest costs, which was $20 million less per ship than expected.
- Subcommittee on Readiness Chairman D. Daniel expressed dissatisfaction with the fact that the Navy’s use of long-term leases “effectively circumvents the Congressional authorization/appropriations process and impedes timely and effective legislative review.

September 1982 – Conditional award made to Ocean Carriers (a.k.a. Shipholdings) (2 tankers firm + 3 option).

September 30, 1982 – Argent submitted its T-5 Tanker Replacement Supplemental Report. Using actual cost data as stipulated in the firm contract offer, AGL concluded that the Navy’s present value cost to charter the T-5 Replacement vessels would be $49.54 million per vessel, compared to a purchase cost of $66 million. The analysis included the revisions made by the TEFRA.

October 1982 – Option exercised for 2nd Waterman TAKX.
December 2, 1982 – The Comptroller of the Navy requested the legal opinion of the United States Comptroller General as to the proper manner in which to record certain obligations of the Naval Industrial Fund in connection with the TAKX/T-5 Program.


1983 – *Supplemental Appropriations Act of 1983* (Public Law 98-63) passed. Congress granted the Navy authority to proceed with the leasing arrangements in the absence of an appropriation covering the total termination liability of the lease agreement.

January 14, 1983 – Options exercised for 4th and 5th Maersk, 3rd - 5th General Dynamics, and 3rd Waterman TAKX. Also the GAO opinion regarding termination liability accounting was obtained.

January 28, 1983 – USCGEN’s office issued its report on the NIF in connection with the TAKX/T-5 Program. It stated that upon receipt of the ships, the Navy must record the total cost for the five-year base period plus the termination value as if terminated at the end of the five-year period.

January 30, 1983 – *Washington Post* article, “Rent-a-Navy,” critical of TAKX/T-5 Deal, declared that the majority of the Deal’s cost is hidden from view because it shows up as a tax loss to the Treasury rather than a direct cost in the budget and that “Congress owes it to itself and the taxpayer to tell the Pentagon to terminate [the] leases immediately and to prohibit the evasion of budget limits.”

February 1983 – Institute for Defense Analyses (Program Analysis Division) prepared a lease versus purchase analysis for the Office of the Secretary of Defense Research and Engineering. It concluded that leasing is more cost effective than purchasing.

February 23, 1983 – Senator Howard M. Metzenbaum (D-Ohio) wrote to Donald T. Regan, Secretary of the Treasury, to describe the tax indemnification provision of the Deal as “outrageous” and asked him to “raise in the Cabinet the question of whether it is appropriate and acceptable for [the Navy] to subsidize a legal case against the IRS.”

February 25, 1983 – Washington Post article, “Navy Promises Suppliers Tax Breaks,” Senator Metzenbaum again voiced displeasure regarding the Deal: “The whole idea of the Navy leasing ships instead of buying them has raised some eyebrows on the Hill [Capitol Hill], but discovering that we would subsidize these companies if the Internal Revenue Service rules against these questionable tax breaks is absolutely unbelievable.” The Navy responded that it had “executed a charter program for cargo-carrying services based on sound business practices, [that it was] mindful of current tax laws and the best interests of the American people, [and that it did so] in full and public view with the express permission of Congress.”

February 28, 1983 – Everett Pyatt, Principal Deputy Assistant Secretary of the Navy (Shipbuilding and Logistics), delivered a statement before the Subcommittee on Oversight of the House Ways and Means Committee regarding the Navy’s TAKX Program. He stated that the conclusions of the independent LvP studies indicated that chartering the TAKX/T-5 vessels could save the Navy 19 percent of the ship’s cost in present value dollars. However, he also revealed that the assumptions (i.e., discount rate, pre-tax/after-tax basis, and various participant tax rates) were variable and could have a range of results from a 15 percent savings to a five percent additional cost. He also addressed Senator Metzenbaum’s concerns by saying that legal fees associated with charter and build contracts were common and assured Congress that “[n]o legal expenses incurred in connection with lawsuits, actions, disputes or similar proceedings in which
the Government is an adverse party may be included in the Basic Capitalized Costs [; however,] [t]he fees may be adjusted to reflect actual costs, but cannot exceed the amount proposed by the offeror.”

**March 18, 1983** – Subcommittee on Oversight of the House Ways and Means Committee Chairman Charles B. Rangel (D-NY) sent a letter to SECNAV with further questions regarding the TAKX/T-5 Program. SECNAV responded to all his questions the same day.

**March 25, 1983** – AGL issued a rebuttal analysis of the Joint Committee on Taxation’s February 15, 1983, report on the Tax Aspects of the TAKX MPS Program.

**April 1983** – Options exercised for 3rd - 5th T-5 tanker.

**June 8, 1983** – John E. Chapoton, Assistant Secretary (Tax Policy) Department of the Treasury, testified before the House Ways and Means Committee. He discussed H.R. 3110, the *Governmental Leasing Act of 1983*, which would deny certain tax incentives for property used by Governments and other tax-exempt entities. He also stated that the Treasury Department supported the Bill as it applied to property used by domestic entities and foreign Governments.

**June 28, 1983** – USCGEN’s (a.k.a. GAO) issued an analytical report on DoD’s use of long-term capital leases. Among other things, it recommended that Congress pass legislation to prevent DoD from entering into long-term leases without Congressional analysis and authorization. GAO also alleged, using the JCT’s methodology and assumptions, that its and the JCT’s analyses demonstrated true LvP costs (whereas they claimed AGL used constant dollars when discounting instead of current dollars--AGL subsequently rebutted this claim).
**September 1983** – The *FY 1984 Department of Defense Authorization Act* (P.L. 98-94) passed. The Act established a number of statutory conditions and requirements for entering into long-term leases. These requirements, which have since been codified in 10 U.S.C. 2401, increased Congressional control over certain lease decisions, made lease decisions more transparent, and provided for the development of more detailed guidelines for conducting lease versus purchase comparisons.

**November 1983** – IDA published its revised report on the LvP of Naval auxiliary ships. This report maintained its earlier conclusion (Feb 83) that leasing was more cost effective than purchasing.

**October 31, 1984** – The OMB and Treasury issued joint guidelines for DoD’s leases (*Joint OMB and Treasury Guidelines to the Department of Defense Covering Lease or Charter Arrangements for Aircraft or Naval Vessels*), which required that any special tax benefits conveyed to the ship-owner be added to the cost of a lease in a lease versus purchase analysis.

**December 10, 1984** – The Internal Revenue Service ruled that the Deal was a ‘usage’ vice a ‘service’ contract, which made the Income Tax Credit unavailable. (Each contract, however, contained a clause indemnifying the lessor from the loss of the ITC. As a result, the Navy agreed to return to the lessor the amount of the ITC in the form of increased capital hire payments.)
1984 – The *Deficit Reduction Act of 1984* (Public Law 98-369) passed. The Act modified tax laws and eliminated the benefits available to the owners of assets leased to Government entities. Specifically, it removed the ability for the Equity Owners to use the Accelerated Cost Recovery System. The legislation also reduced the availability of tax benefits by lengthening the period for tax depreciation to a period equal to 125 percent of the lease term. It eliminated the ITC for owners of assets leased to Government entities. This legislation was not retroactive to prior lease agreements.

1985 – *Appropriations Act of 1985* (Public Law 98-473) passed. Congress provided the Navy with additional contract authority, which allowed the Navy to proceed with the leasing arrangements in the absence of an appropriation or existing unobligated balance sufficient to cover the total lease payments for all five years of the 5-year base period.

1985 – *Balanced Budget and Emergency Deficit Control Act of 1985* (Public Law 99-177) passed. The Act established statutory limits on federal Government spending by creating spending caps on discretionary spending. To track progress against and compliance with budget enforcement requirements and spending caps, budget scorekeeping guidelines were established for lease-purchases, capital and operating leases.

1990-Present

1990 – *Oil Pollution Act of 1990* passed. The Act required that all tankers built after 1990 to be double-hulled. In addition, the act slowly phased out all existing single-hulled tankers.

**August 1990** – MPSRON-1 and MPSRON-2 deployed to Saudi Arabia to off-load equipment for Marine Expeditionary Units in support of Operation Desert Shield.
December 1990 – MPSRON-3 units deployed to Saudi Arabia to off-load equipment in support of ODS.

February 1991 – US-led multi-national forces ground campaign (Operation Desert Storm) to remove Iraqi forces from Kuwait accomplished in less than 48 hours.

Summer – Fall 1991 – MPF ships provided logistic support for Operation Fiery Vigil, the humanitarian assistance to US forces and the Philippine people during the eruption and aftermath of Mount Pinatubo.

October 29, 1992 – OMB Circular A-94 (*Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*) issued to prevent lease versus purchase analysis from understating the Government’s total cost of leasing. This guidance, applied Government-wide, prescribed that analysis (1) should add special tax benefits to the cost of leasing, and (2) should not subtract the normal payment of taxes on the lessor’s income derived from the leases from the total lease costs.

Winter – Spring 1993 – MPF ships provided logistic support for Operation Restore Hope, which enabled USMC forces to deploy to Somalia.


May 2001 – MSC investigated possible replacement alternatives for the T-5 Tanker whose 20 year leases were expiring. The resultant study was titled *T-5 Tankers: Replacement Alternatives*.

October 25, 2001 – Operation Enduring Freedom, the assault against the Taliban Government and Terrorist Forces in Afghanistan, began.

January 15, 2003 – MSC exercised options to buy Shipholding #1 T-5 tanker, Paul Buck; Shipholding #3 T-5 tanker, Samuel L. Cobb; Shipholding #4 T-5 tanker, Richard G. Matthiesen; and Shipholding #5 T-5 tanker, Lawrence H. Gianella.

January 2003 – MSC unable to negotiate an equitable price for Shipholdings #2 T-5 tanker, Gus W. Darnell.

April 2003 – Operation Iraqi Freedom, the liberation of Iraq by US-led multi-national coalition forces, began. OIF supported by ships of the MPF and Sealift Tanker Programs.

Future

August 2005 – Lease option scheduled to expire on Shipholding #2 T-5 tanker, Gus W. Darnell.
APPENDIX C

MAERSK VESSEL NUMBER THREE AND SHIPHOLDINGS VESSEL NUMBER THREE: CAPITAL HIRE AND TERMINATION VALUES

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<th>CAPITAL HIRE</th>
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### SCHEDULE A
#### CAPITAL HIRE RATES

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* Applicable only if the Time Charter is terminated pursuant to Article 4(b) of the Time Charter on such date.
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**SCHEDULE C**

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* Applicable only if the Time Charter is terminated pursuant to Article 11 of the Time Charter on or within 60 days after each date.
### SCHEDULE A

**CAPITAL HIRE RATES**

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### Schedule A

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* Applicable only if the Time Charter is terminated pursuant to Article 4(b) or 11 of the Time Charter on or within 60 days after such date.
## SCHEDULE B

### TERMINATION VALUES

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## SCHEDULE B
### TERMINATION VALUES

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* Applicable only if the Time Charter is terminated pursuant to Article 4(b) of the Time Charter on such date.
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LIST OF REFERENCES


Argent Group, Ltd. Analysis of the Report by the Staff of the Joint Committee on Taxation Regarding Tax Aspects of the TAKX Maritime Prepositioning Ship Program and Other Concerns, 25 March 1983.

Argent Group Ltd. Memorandum on the Success of MPS and T-5 Programs. 22 May 1986.


Headquarters Marine Corps, “National Strategic Asset, Blount Island, FL – The case for DoD Acquisition – May 2003.”


Maritime Administration. 1 USC. 101 (46 App. USC. 1101 (2002)).


Military Sealift Command. MSC Overview: Mission.  

Military Sealift Command. MSC Ship Inventory.  

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV 1ST LT Alex Bonnyman  

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV 1ST LT Baldomero Lopez.  

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV 1ST LT Jack Lummus.  

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV 2ND LT John P. Bobo.  
Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV CPL Louis J. Hague Jr.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV PFC Dewayne T. Williams.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV PFC James Anderson Jr.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV PFC William B. Baugh.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, MV PVT Franklin J. Phillips.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, SS MAJ Stephen W. Pless.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, SS PFC Eugene A. Obregon.

Military Sealift Command. MSC Ship Inventory. Prepositioning Ships, SS SGT Matej Kocak.


Pyatt, Everett. Statement before the Subcommittee on Oversight of the House Ways and Means Committee on the Navy’s TAKX Program. 28 February 1983.


Sawyer, George and Dan Daniel. Statements made before the Subcommittee on Readiness of the House Armed Services Committee. 17 September 1982.


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