

Nautilus Shipping Inc.

"Quality in Transportation Services"

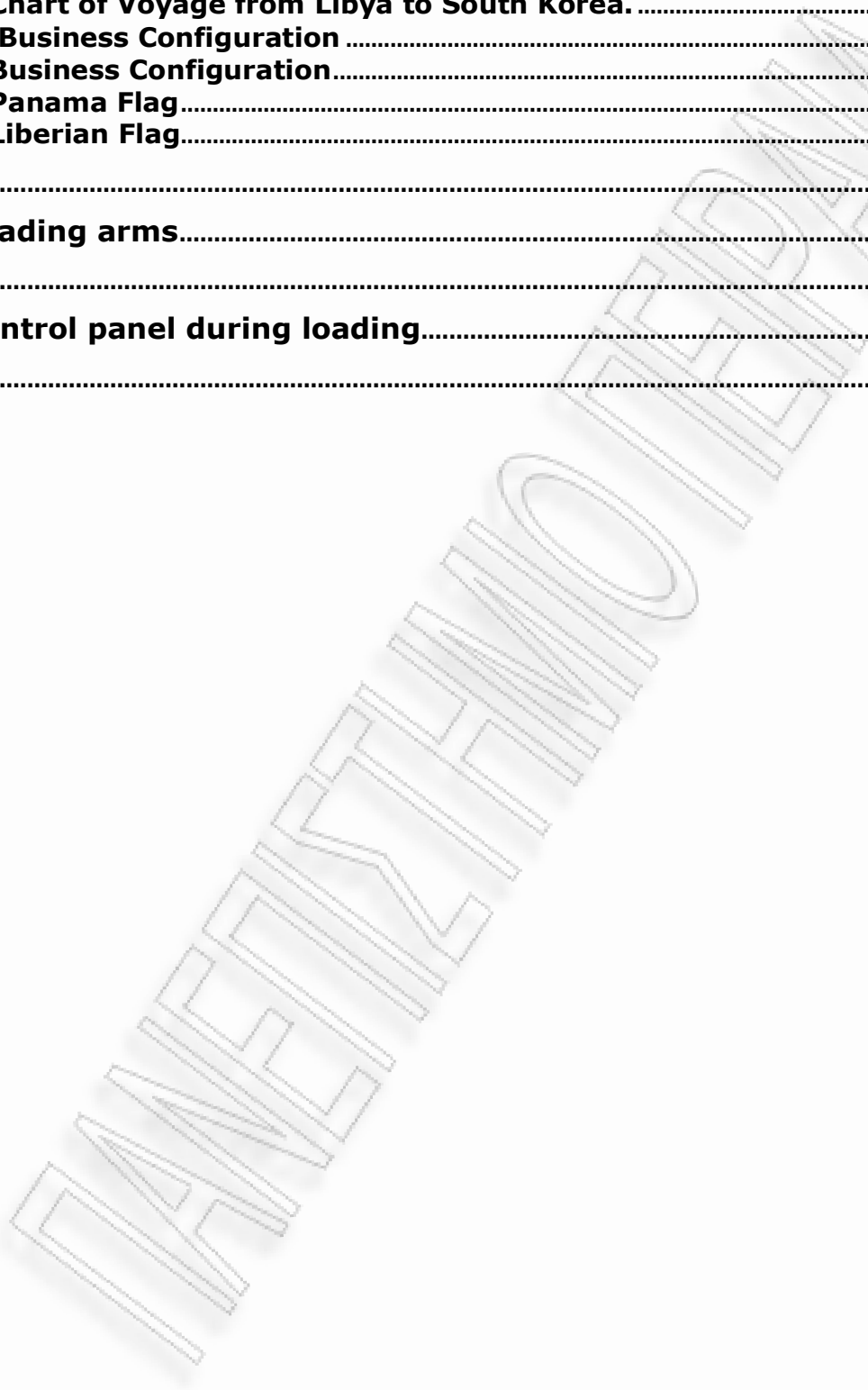


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1. Executive summary	5
2 - Business configuration	7
3 - Shipboard Operations	16
3.1 –Voyage Plan and Major Points of Interest	16
3.2 - Suez-max ship design and include specifications	18
3.3 -A detailed voyage plan	19
3.4 -Procedures for loading and discharging product as well as while out at sea.	19
3.4.1 Cargo Procedures	19
3.4.2 Ballast Procedures	19
3.4.3 Navigation	19
3.4.4 Engine Operations.....	20
3.4.5 Auxiliary Equipment Operations (all non-main engine propulsion equipment)	21
3.4.6 Long Range Radio Operations.....	22
3.4.7 Deck Operations	22
3.4.8 General Operations.....	22
3.4.9 General Administration.....	23
3.5 - Ship Officers and Crew	24
3.6 - Classification Society	32
4 - The Chinese Shipyards And Flags of Registry	35
4.1. - The structure of the Chinese shipbuilding Industry	35
4.2. - Ownership Structure.....	36
4.3. - Workforce.....	36
4.5. - Industry Performance.....	37
4.6. - World Share of Production.....	37
4.7. - Panamanian Registry	40
4.7.1. - Economic Importance of Panama’s Ship Registry	40
4.7.2. - History of Panama’s Ship Registry.....	40
4.7.3. - Advantages of Panama registry	42
1. Ownership	42
Any person or company is acceptable to register ships under the Panamanian flag. Also, non-resident shipping corporations don’t pay income or withholding taxes. 2. Vessel Eligibility	42
2. Vessel Eligibility	43
3. Taxation Issues	43
4. Technical Certificates	43
5. Segumar	44
6. Dual Registry	44
7. Standards	45
8. Fleet Discounts	45

9. Transfer of Fleet Discounts	46
4.7.4.- Panamanian Registry Provisions for Nautilus	46
4.8. - Liberian Registry	48
4.8.1. - Advantage of Liberian Registry	48
1. Vessel Construction	48
2. Vessel Manning	48
4. Ease of Registration	49
5. Tax Sensible Jurisdiction	49
6. Double Taxation Treaties	49
7. Vessel Surveys	49
9. Safety	50
10. Security	50
11. Adoptions and Enforcement of International Regulations	50
4.8.2. - Liberian Registry Provisions for Nautilus.....	51
5 - Law and Time Charter	52
5.1 - Shelltime 4 Charter Party In Trading And Shipping	52
5.2.- Time Charter Party	54
6 - Finance	76
6.1 - Brief history and current situation of the financial market	76
6.1.1 - Year 2004	78
6.1.2 - Banks.....	80
6.1.3 - The problem becomes global.....	82
6.1.4 - Crisis in the maritime sector:.....	83
6.1.5 - Shipping cycle.....	84
6.2 - Profitability analysis of the new buildings	87
6.2.1 - Tools and ways that we are going to use during the profitability analysis	87
6.2.2 - Vessel #1: KEMAL 3.....	88
6.2.3 - Vessel #2: MUSTAFA.....	91
7 - Marine insurance	99
7.1 - History of ocean marine insurance	99
7.2 - Main types of marine insurance	102
7.2.1 - Cargo Marine Insurance	102
7.2.2 - Hull Insurance	102
7.2.3 - Protection & Indemnity (P&I).....	117
8 Conclusions and recommendations	122
BIBLIOGRAPHY	125
APPENDIX	125

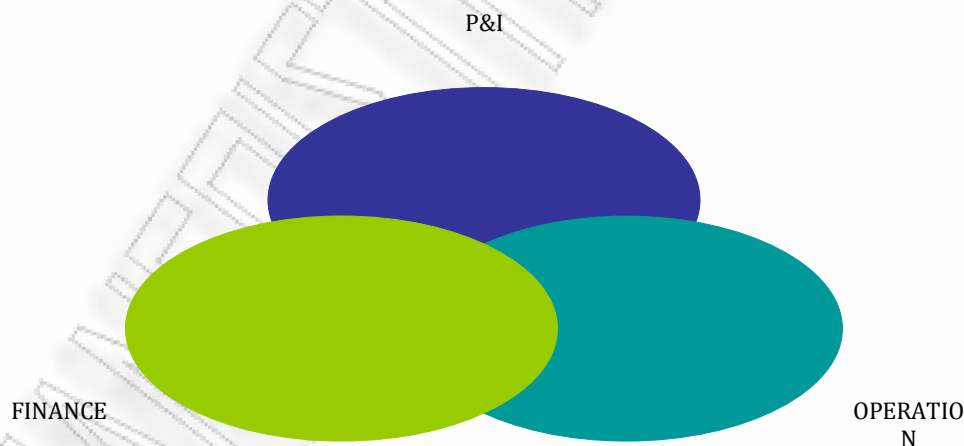
General Voyage Plan from Libya to South Korea	128
Chart of Voyage from Libya to South Korea	130
Business Configuration	130
Business Configuration	131
Panama Flag	132
Liberian Flag	132
.....	133
Loading arms	133
.....	135
Control panel during loading	135
.....	136



1. Executive summary

This capstone is a business plan about 3 tankers. The scope of the business plan is the legal and financial operation of the 3 vessels with the best way in order to provide maximum net profit to the company. The company is Nautilus Inc and it is a company that already exists in the shipping industry and already operates tanker vessels.

The business plane is going to be divided in 3 parts. Those parts are going to be operations, finance and P&I. The division of the business plan in those 3 sectors is based on the rule of triangle that many years ago a famous Greek ship owner point those 3 sectors as the most important in order to become a successful manager in the shipping industry. The assumption is that the manager has to be a rounded person, know fully those 3 sectors and combine the information between them. All those sectors are going to be evaluated and examined in full length during the project.



During this capstone we are going to separate the business plan in those 3 sectors. In order to be more specific we are going to split the operation part in shipboard operations, shipyard operations, flags of registry, the legal part of the company and the examination of the charter party. On the other hand the finance part is going to be divided in 3 sectors for each of the 3 motor tanker

vessels. The finance part is going to be about construction of the N.P.V. , the profitability index and the I.R.R.

The last part of the business plan is about the insurance part. The insurance part is going to be about the cargo marine insurance, the hull insurance and the protection and indemnity.

Nautilus Corporation is going to add in the existing fleet next 3 Suez max tankers vessels:

NEW BUILDINGS

			ICE	DWT M/T	DRAFT (m)	LOA (m)	BEAM (m)	FLAG	BUILT
		Tanker Vessels							

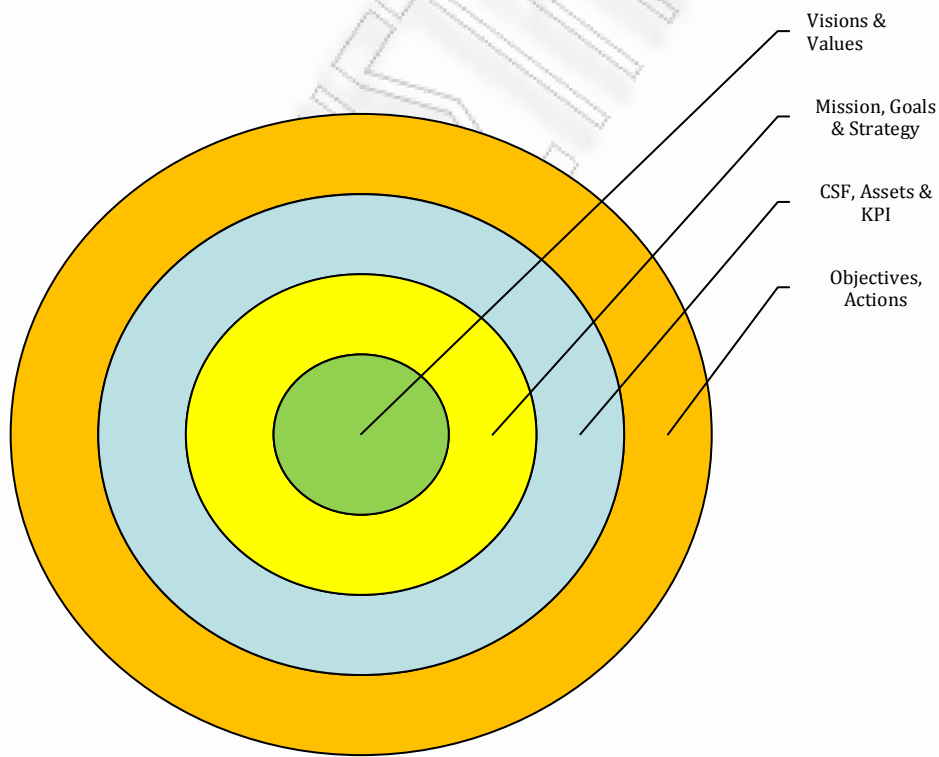
1	Mt	KEMAL 3		170,000	14.00	275.00	48,00	Liberian	2011
2	Mt	MUSTAFA		170,000	14.00	275.00	48.00	Panamanian	2011
3	Mt	ARMAN		170,000	14.00	275.00	48.00	Panamanian	2011

2 - Business configuration

In order to analyse the profile of the company we are going to use a business configuration. The scope of this part is to give information about the company, the future goals and how they are going to be achieved. The business configuration is going to be divided in four decision cycles.

Decision cycles

1. XL decision cycle: Visions and Values
2. Large decision cycle: Mission, Goals and Strategy
3. Medium decision cycle: Critical Success Factors (CSF), Assets and Key Performance Indicators (KPI)
4. Small decision cycle: Objectives, Actions



1. XL decision cycle: Visions and Values

The visions and the values of the company are fundamental elements. Both of them are in the extra large decision cycle of the business configuration and it is very difficult to change them during the operation of the company. The visions and values are fundamental cornerstones of a company's culture. Visions and values of Nautilus Corporation are:

- Toe the line of the Turkish (Nautilus is based and established in Istanbul) ,Panamanian, Liberian and Chinese legal system
- Trust among employees
- Serve the needs of the clients
- Use the Japanese model of doing business "trust respect and patience"
- To become a competitive shipping company in the industry of tanker providing high quality services.

2. Large decision cycle: Mission, Goals and Strategy

Mission is the destination of the company. Mission describes the target that the management team has to achieve. Mission of the company is to deliver world-class transportation of energy using trained and committed professionals to achieve customer satisfaction ensuring safe and environmental excellence. The company has also to operate in a way friendly to the environment and obey the global rules of the protection of the environment.

Goals of the company must be a measurable and achievable target in a specific timing (ex. 2 years -5 years).

Goal of the company is to increase the CFD index by 20%.

CFD is cash flow to debt

$$\text{CFD} = \frac{\text{CASH FLOW FROM THE OPERATION}}{\text{TOTAL DEBT}}$$

$$\text{CFD} = \frac{\text{NET INCOME} + \text{DEPRECIATION}}{\text{TOTAL DEBT}}$$

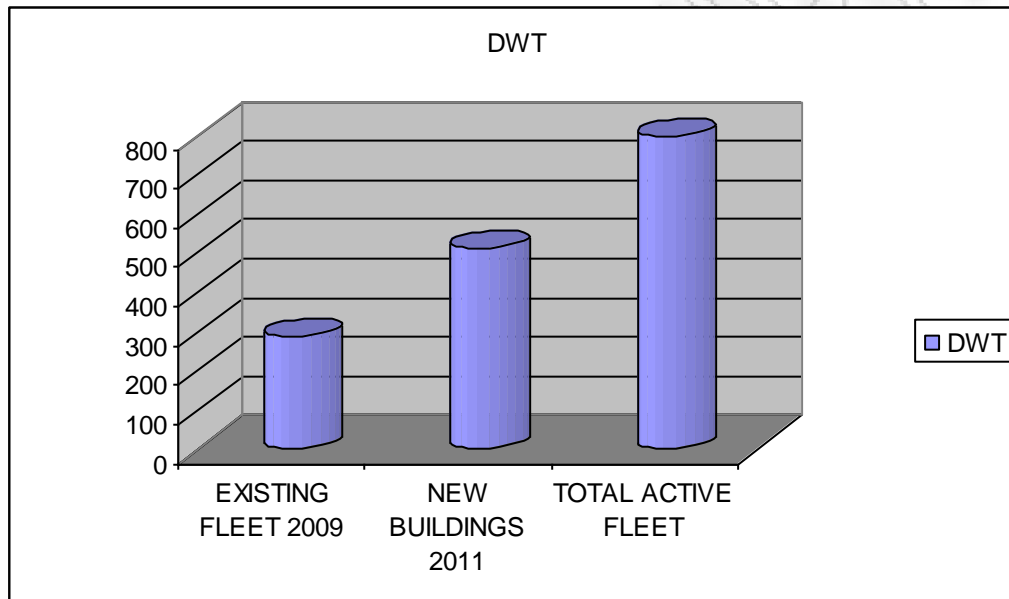
This index is very important in finance. Due to statistics that have being done in this index it shows that companies that had negative this index faced the possibility of 92% of bankruptcy in the next 2 years. If this index is positive there is no such problem for the company. In our occasion we would try not only to have positive this index but also to increase it by 20%. The time planning for this goal is 4 years. (Current CFD =0.10)

Current CFD	0.10
CFD IN 4 YEARS	0.12

Strategies are statements that describe principle approaches and actions that are going to help the company to achieve the goals.

Strategies of Nautilus Co:

- Increase the total deadweight of the company from 286,000DWT to 796,000 DWT



EXISTING FLEET

			ICE	DWT M/T	DRAFT (m)	LOA (m)	BEAM (m)	FLAG	BUILT
Tanker Vessels									
1	mt	KEMAL 1		60,000	13.20	228.50	32.20	Panamanian	2003
2	mt	KEMAL 2		60,000	13.20	228.50	32.20	Panamanian	2003
3	mt	ORLOF		60,000	13.20	228.50	32.20	Liberian	2003
4	mt	PANDORA		36,000	11.20	183.00	27.34	Panamanian	2006
5	mt	ISTANBUL D.		35,000	10.51	175.97	31.00	Liberian	2005
6	mt	PILAR		35,000	10.51	175.97	31.00	Liberian	2004

- Charter the new buildings in a time charter so the company is going to have the ability to earn standard and long term cash flows.
- The above two strategies are the core stones of the business plan of nautilus corporation. In order for the company to achieve the goals there is going to be a business plan during this project divided in three sectors: finance, operation and P&I.

3. Medium decision cycle: Critical Success Factors (CSF), Assets and Key Performance Indicators (KPI)

Critical Success Factors (CSF) are number of areas in which results will ensure competitive performance of the company. The first CSF of the Nautilus Corporation is to increase the revenue by 50 % of the company during the first semester after the delivery of the new buildings. The second CSF is to gain an environmental award from the Turkish government. . If we succeed in these two goals we can understand that "things are going right". This means that the company has a higher possibility to achieve the goals of the large decision cycle (mission, goals and strategies).

Assets are customers, capital, buildings, equipment etc. When we use the word asset we mean the levers the company can use in order to achieve her plans.

Assets of Nautilus Corporation

1. Existing fleet
 - 1.1. vessel KEMAL 1 60,000 DWT
 - 1.2. vessel KEMAL 2 60,000 DWT
 - 1.3. vessel ORLOF 60,000 DWT
 - 1.4. vessel PANDORA 36,000DWT
 - 1.5. vessel ISTAMBUL D. 35,000DWT
 - 1.6. vessel PILAR 35,000DWT

2. Head offices in turkey
 - 2.1. 100 employees
 - 2.2. 2 buildings in Istanbul
 - 2.3. "Know how" of the operation of tankers

Key Performance Indicators (KPI)

KPI is one of the most important steps during the business configuration. Target of the KPI is the ability to measure all the above issues. KPI is important because it gives the opportunity the company to understand how good the operation part is and also to use a feed-back in order to improve some of the issues that are weak.

KPIs of the company.

1. Cost Performance Index (CPI)
2. Budgeted Cost of Work Performed

These two KPIs are going to help the company control and reduce the cost.

3. Schedule Variance (CV)

Schedule variance is a KPI that is going to measure the time planning of the company and it is helpful for the critical success factors and the goals of the company.

$$4. \text{ Environmental Benefit cost ratio (BCR)} = \frac{\Sigma \text{ of yearly benefits to the environment}}{\Sigma \text{ of yearly cost}^1}$$

This ratio is going to give information to the company about the performance in the mission of the business configuration.

4. Small decision Cycle: **Objectives**

4.1) Finance

1. Identify the current financial condition of the economy
2. What are the events that occur the last year that had as a result the economic crisis?
 2. Why the maritime industry is infected from the general economic crisis?
 3. How does a shipping cycle occurs –operates?
 4. Financial tools-ways to evaluate the new buildings of the company and ways to measure the profitability of them.

4.2) Law

1. Introduction to charter parties
2. The benefits of time charter party for shipping industry
3. Shelltime4 tanker charter party in trading and shipping
4. The importance of Bill of Lading

¹ John J. Coyle, Edward J. Bardi, and Robert A. Novack Transportation, 6 edition published Jan 24, 2005 pg 72

4.3) Shipboard operations:

- 1 -Identify the intended route and major points of interest
- 2 - To create a Suez-max ship design and include specifications
- 3 -A detailed voyage plan
- 4 -Procedures for loading and discharging product as well as while out at sea.
- 5 –Describe contingency plans for the ship along the voyage
- 6 -Hiring ship officers, crew and personnel with rotation schedule

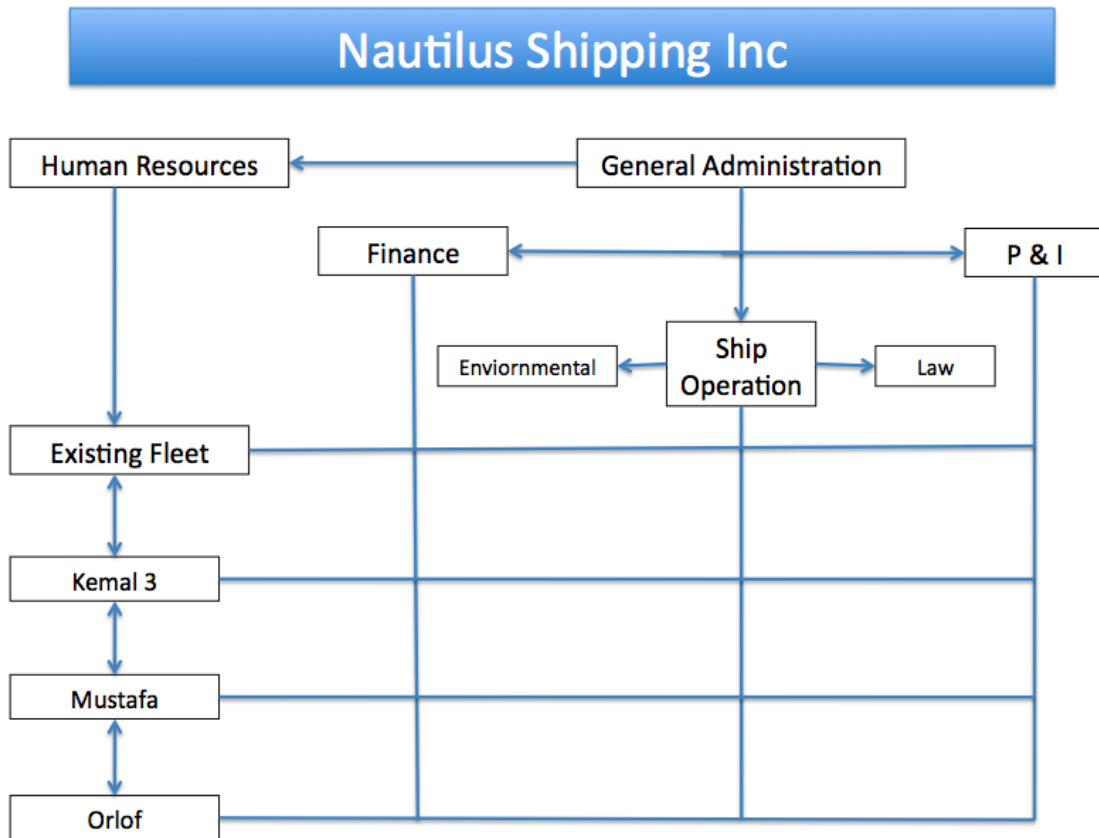
4.4.) Environment

1. Chinese shipbuilding industry
2. The advantages of Panamanian shipping registry
3. The advantages of Liberian shipping registry

4.5.) Insurance

1. Process of vessels' evaluation and decision for the appropriate insurance company
2. Hull insurance
3. Protection and Indemnity (P&I clubs)
4. Other marine insurances

Structure of the company:



PAPER

3 - Shipboard Operations

3.1 –Voyage Plan and Major Points of Interest

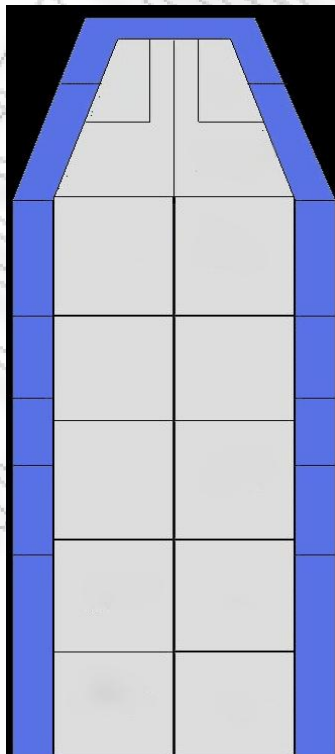
Waypoint	Point of Interest	Distance Between WP's
Waypoint #1	Az Zuwaytinah, Libya	780 nautical miles
Waypoint #2	Suez Canal	300 nautical miles
Waypoint #3	Red Sea	1040 nautical miles
Waypoint #4	Gulf of Aden	150 nautical miles
Waypoint #5	Arabian Basin	760 nautical miles
Waypoint #6	South or Sri Lanka	2000 nautical miles
Waypoint #7	Great Channel	1100 nautical miles
Waypoint #8	Straits of Malacca	200 nautical miles
Waypoint #9	Singapore Strait	480 nautical miles
Waypoint #10	Middle Channel	170 nautical miles
Waypoint #11	China Sea	1400 nautical miles
Waypoint #12	Taiwan Strait	1300 nautical miles
Waypoint #13	Korean Strait	800 nautical miles
Waypoint #14	Ulsan, South Korea	50 nautical miles

The Voyage Plan may be found in the appendix and covers an estimate route in which the ships will follow from the port of loading to the port of discharge. It is important to understand that not every waypoint may be encountered during the voyage. A ship may deviate from course for a variety of reason and it is important to establish contingency plans throughout the voyage.

Deviations may include stopping to make a call at a port or anchorage for bunkers or stores. The ship owner may deviate the ship to assist in the rescue of lives or property, tow or other justifiable reasons. However the ship owner does not have the right to deviate from the destination port. Many times the ship owner and charterer may establish a route for the ship which is deemed to be the shortest and fastest route, but ultimately the master must assess the route and at times it may be deemed to not be the most suitable route, due to piracy, weather or any other reason the master may believe will affect the voyage of the vessel.

3.2 - Suez-max ship design and include specifications

Type	Crude Oil Tanker
Built	Novemeber 2011
Builders Name	Chengxi Shipyard Co. Ltd
Flag of Registry	Panama
Length Overall	275.0 meters
Length Between Perpendiculars	265.0 meters
Breadth Molded	48.0 meters
Loaded Draught	14.0 meters
Air Draft	43.0 meters
Block Coefficient	0.8219
Final Loaded Displacement	170,000 M/T
Final Lightship	21,000 M/T
Final Deadweight	149,000 M/T
Tanks	6 Port / Starboard Tanks
Tank Capacity	147,500 M/T
Speed	15.5 knots



3.3 -A detailed voyage plan

See Attached in Appendix

3.4 -Procedures for loading and discharging product as well as while out at sea.

3.4.1 Cargo Procedures

1. Loading
2. Discharging
3. Maintenance of cargo equipment / deck stores/wares and ballast tank cleaning and repairs of cargo , desk equipment, sores and wares
4. Record keeping (port logs)
5. Repair
 - a. Reefer-maintenance
 - b. Inspection

3.4.2 Ballast Procedures

1. Loading
2. Stability and Trim
3. Discharging

3.4.3 Navigation

1. Track keeping
 - a. Day – good visibility
 - b. Night – good visibility
 - c. Restricted visibility
2. Maneuvering
 - a. Chart correction
3. Collision a voidance
4. Voyage/passage planning

5. Record/chart keeping and update /bridge logs/charts and navigation information
6. Maintenances
 - a. Unscheduled
 - b. Planned Maintenance Schedule
7. Test vital systems
 - a. Prior to leaving port
 - b. Prior to entering port
8. Bridge housekeeping
9. Weather monitoring
 - a. Reporting
 - b. Planning
10. Hull performance
 - a. Monitoring
 - b. Maneuvering
 - c. Planning
11. Training (equipment operations, procedure review, standard operations)

3.4.4 Engine Operations

1. Operations – routine and watch standing
2. Maintenance
 - a. Unscheduled
 - b. Planned Maintenance Schedule
3. Record keeping
 - a. Records and record keeping
 - b. Soundings

3.4.5 Auxiliary Equipment Operations (all non-main engine propulsion equipment)

1. Generators
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
2. Fuel oil systems
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
3. Boilers
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
4. Evaporators
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
5. Refrigerator/air conditioning
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
6. Sewage systems
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
7. Inert gas systems
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule

8. Electrical/ electrical control systems
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
9. Tools and test equipment
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
10. Pumps
 - a. Operations
 - b. Unscheduled maintenance
 - c. Planned Maintenance Schedule
11. Fuel transfer
12. Record keeping

3.4.6 Long Range Radio Operations

3.4.7 Deck Operations

1. Docking / undocking
2. Mooring/unmooring (offshore)
3. Anchoring/heaving-in
4. Helicopter operations
5. Underwater lighting
6. Tugs/crane using
7. Preparation for going into yard/drydock

3.4.8 General Operations

1. Drills (lifeboat, firefighting, security, etc)
2. Maintenance (lifeboats)
3. Safety tours
4. Vessel fabric maintenance (paint, chip, grease, coat)

5. Deck equipment maintenance (lights, structure, mooring equipment, anchor, bow transfer, gangway, capstans, windlass)
6. Line and wire maintenance
7. Stores and supplies
 - a. Handling
 - b. Storage
 - c. Ordering
8. Other training
9. Medical
10. Bunkering
11. Safety equipment maintenance, gas test meters, and gauging equipment
12. Vessel structure maintenance/repair
13. Steering gear maintenance
14. Cleaning / wash down
 - a. Deck
 - b. Engine room housekeeping
 - c. Supervise shore personnel / gangs
 - d. Stability and cargo planning

3.4.9 General Administration

1. Financial / Payroll
2. Labor relations
3. Meetings
 - a. Shipboard management
 - b. Safety
4. Regulatory requirement monitoring / inspections / walk around with inspection regulatory authorities
5. Special projects

3.5 - Ship Officers and Crew

The Certificate of Inspection for ships requires a minimum crew of 14 including officers. It is more efficient to run with a crew of 15, which would include the captain, three mates, one boatswain, three able body seamen, one chief engineer, three assistant engineers, one pumpman, one oiler and one cook. For health reasons it is preferred to have a cook. The ships officers in the Nautilus Corporation are British and American licensed officers. Unlicensed officers may be from any country.

The Captain or Master is the leading officer aboard the ship in all aspects. He has the overall command of the ship and is also responsible for it. He is also responsible for the operations, safety, and navigation of each voyage. The Captains oversees the outfitting, the maintenance and also participates in the planning and scheduling of maintenance. The captain supervises all emergency drills and he is also responsible for all domestic and foreign ship's business. He makes and keeps all of the necessary and required documents for all governments and private agencies overseeing vessel. He has the responsibility of keeping ship's account and records, ship's equipment with agents, customs, and any other agencies. The responsibility of keeping the morale and discipline of the ships crew lies on the captain as well. Communicates with the staff in the Port Office staff with respect to personnel matters as necessary. Ultimately other duties are performed as required.

The Chief Mate is the second in command in deck department and generally handles all cargo operations, but also stands watch. He plans work of deck department personnel and also supervises as well. The scheduling of working hours and time off including scheduling of vacations while in port is done by the Chief Mate. Directly communicates with the captain to update of deck department condition, and conduct and reliability of deck personnel. Before the ship sails, he must ensure the ship and all gear, and related items are secure for sea. Frequently there is a report to the Captain on the status of crew and ship's readiness. He usually stands 4-8 bridge watches; posts qualified and alert lookouts during watch at sea to ensure a properly maintained and efficient watch; checks to see that Quartermaster steers correct course, and that lookouts carry out all orders; maneuvers ship, under Master's general supervision. Is ship's damage control and training officer; may supervise Second and Third Officers. Verifies muster and station bills are properly prepared and posted, and that fire fighting and lifesaving equipment are in good condition and crew is properly trained in use. Is in charge on deck during fire and boat drills and ensures personnel know their emergency stations and duties. In case of emergency the Chief Mate may become the Medical Officer in along with the Captain.

The Second Mate is the navigation officer and normally 12-4 bridge watch; posts qualified and alert lookouts during watch at sea to ensure a properly maintained and efficient watch; checks to see that able body seamen

steers the correct course, and that they carry out all orders; maneuvers the ship, under Master's general supervision. Checks that all charts, and navigational publications required are onboard. Maintains and corrects nautical charts and publications as specified by national geospatial agency. Plots the voyage track for the Captain's approval by using the appropriate scale charts, provides Master with navigational information for transit routes to ports of call, including Sailing Directions, Tide and Current tables, and Light List, amongst other sources that may be appropriate prior to entering or leaving any port. Ensures that the bridge electronics, lights, navigational and alarm systems, are all in working order. As well as, all required flags are aboard and in good condition and enough spare parts are onboard. All requisitions and repairs are submitted to the Chief Mate.

The Third Mate is the main officer in charge of safety and is responsible under the supervision of Chief Mate, for the condition and repair of life rings, life jackets, life rafts, life boats and other lifesaving equipment, all fire fighting equipment and other safety or emergency equipment not specified to other departments. The Third Mate may also be in command a lifeboat or life raft and musters the crew, then instruct them in their duties, and in proper handling of necessary. Directs crew to their duties during emergency drills. Normally stands the 8-12 bridge watch and maneuvers the ship under the master's general supervision and checks to see that the able body seaman steers the correct course, and that carry out all orders.

The Boatswain works under the Chief Mate and supervises able body seamen in maintenance of the interior and exterior of deck department spaces, which includes the ship's hull, cargo tanks, deck, bulkheads, and superstructure. Instructs the safe operation of the anchor windlass, capstans, winches, and other deck machinery. He operates the controls for the launching and recovery of lifeboats and other safety gear during drills and emergencies, under orders of Chief Mate. Directs rigging of the gangway when in port. He also delegates work equitably within the department and the tracks overtime of the able body seamen. Is responsible for all hands using proper safety equipment. Maintains inventory of paint and Boatswain locker supplies and all deck department stores and maintains accurate records of inventory, and deck work logs.

Able body seaman maintains an assigned cleaning station; Cleans, chips, scrapes, wire brushes, primes, and/or paints hull, bulkheads, decks, passageways, deck machinery, or spaces, as directed. Operates vessel's small boats during launch and recovery operations, assists the Boatswain in ground tackle, deck winches, crude oil transfer and crane operation. Stands wheel watch at sea and security watch in port. Handles lines and rigging equipment, may rig and work aloft in a boatswain chair or on staging. Performs other duties as required.

The Chief Engineer ensures the safety of the engine room and all aspects of it. He is responsible for the proper operation, maintenance, and inspection of main and auxiliary machinery, and electrical, mechanical, and safety equipment under jurisdiction. Assigns and supervises work of engine department personnel, including fair allocation of leave and working hours, and proper scheduling of vacations. Determines effective repairs, monitors maintenance, and reports defects that may affect ship's performance to the Captain. He also advises the Captain of matters relating to machinery usage and overall economy of operation. Keeps the Captain informed of department's condition, and conduct and reliability of engine personnel. Is responsible for the safety of the engine department crew. He supervises bunkering to ensure economy of fuel and consumable supplies, and monitors fuel and water daily. Orders, receives, and maintains proper inventory of spare parts and supplies. Sets engine room watches, specifies duties, and ensures a properly maintained watch.

The First Assistant Engineer sets forth engineering related orders for the officers and crew. Reports condition of engine department equipment, machinery, the personnel, repair progress and any abnormal developments. He plans, assigns, and supervises work of engine department personnel and assists the Chief Engineer in planning maintenance and repair schedules with regard to ship's schedule ensuring periodic machine inspections and major repairs are accomplished in port. Stands engine room watch, supervises the pumpman, and ensures watches are stood properly and orders carried out. Maintains a

machinery log of repair dates, spare parts, and consumable supplies. Monitors engine department, stores and prepares any necessary requisitions. Keeps a log of all watch operations and conditions, including unusual occurrences and emergency signals. He also supervises and assists while in port, with the maintenance and repair of engine room equipment and spaces, and in the discharging of cargo and loading of ballast.

The Second Assistant Engineer will handle fuels, straining, and purifiers. Maintains the safe and efficient operation of engines, auxiliary and plant machinery, generators, and motors. Is responsible for the proper operation, condition, and economy of the fuel oil system, including monitoring gauges and repairing equipment. Supervises bunkering and fuel oil transfer, and pumps ballast. Assists, while in port, with maintenance and repair of engine room equipment and spaces, and in loading and discharging of cargo and ballast. Keeps a log of all watch operations and conditions, including unusual occurrences and emergency signals. Stands engine room watch, supervises Oiler, and ensures watches are stood properly and orders carried out.

The Third Assistant Engineer handles water, and lube oils. Maintains HVAC systems, clean engine room bilges, strainers in lubricating system, and all water pumps, tanks, and connected systems. Routinely checks the cleaning, lubrication, and routine maintenance of all machinery and electrical equipment. Also checks the refrigeration plant, and ensures safety devices are in proper

working condition. While in port he assists with the supervision, maintenance, and repair of engine room equipment and spaces, and in loading and discharging of cargo and ballast. Keeps a log of all watch operations and conditions, including unusual occurrences and emergency signals. Stands engine room watch, supervises Oiler, and ensures watches are stood properly and orders carried out. Performs other duties as required.

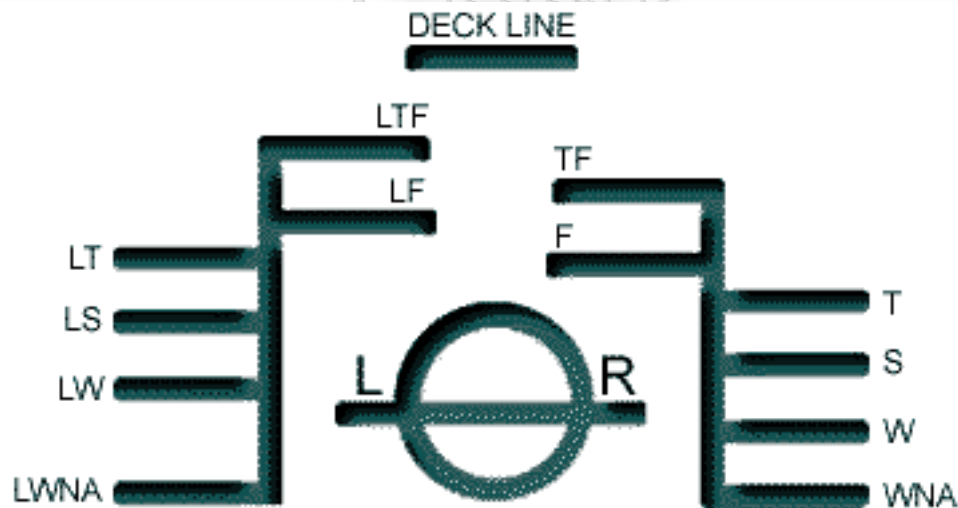
The Pumpman performs all the necessary work for the safe and proper operation of the liquid cargo transfer system. This includes and is not limited to, liquid cargo transfer pumps, liquid cargo stripping pumps, liquid cargo coalesces and separators, strainers, filters, associated piping, valves, fittings, and deck machinery directly related to the transfer of liquid cargo. He is also fully capable of overhauling, repairing and rebuilding different valves, reach rods, packing glands, stuffing tubes and pumps. He is proficient in the performance of shipboard engineering casualty drills, fire drills, collision drills, and performing all duties as assigned. He has a complete knowledge of safety policies and practices, specifically including handling of flammable/dangerous liquids and confined space entry procedures, as well as the Lockout/Tag-out program, procedures and policies. The pumpman is responsible for performing routine required maintenance, repairs, and Condition based monitoring repairs and maintenance actions. These activities include correcting leaks, packing valves, and greasing fittings, glands, bearings and reach rods.

The Oiler performs general duties, including wiping oil; maintaining tools; and cleaning, preparing, and painting of machinery, equipment, and related spaces. He continuously lubricates moving parts of propulsion engines and auxiliary equipment. Also works with the bilge pumps, and cleans the strainers, filters, and centrifuges. Routinely checks on the proper operation of machinery and maintains proper temperatures and pressures, then records the data in the engineering log. While in port he assists with the maintenance and repair of engine room equipment and spaces, loading of stores, connecting to shore side power and water, loading and discharging cargo and ballast. He also helps maintain a log of all watch operations and conditions, including any unusual occurrences in the engine room and emergency signals. At sea the Oiler, usually stands engine room watch, and generator watch in port. At times he may be assigned required day work and performs other duties as required.

The Cooks plans daily or weekly menus for all shipboard personnel aboard. He prepares, cooks, and serves high-quality meals, including freshly baked products, three times daily; and prepares night lunches. Assists in stowage of supplies when received with attention to proper stock rotation and required temperatures. Cleans and maintains sanitary conditions in galley, mess deck, storerooms, access ladders, freezers, and refrigeration compartments. When necessary he prepares, reports and performs other duties as required.

3.6 - Classification Society

A ship is required to be apart of a classification society that establishes a set of rules, regulations and standards for a ship. The classification society oversees the construction of the ship and assures the ship is built to the standards of the classification society. After the construction of the ship and it is in compliance with the standards set it will be in 'class'. Ships are branded with a plimsol mark on the side of the vessel, which recognizes the ships standard and also indicates the maximum amount of cargo allowed to be loaded on the ship. The loading depth varies with different the seasons and different ocean region due to the density of the water.



The letters on each side respectively represent the types of loads lines acceptable per body of water and season. The L and R, represent Lloyds Register stamp of approval on the ship. To remain in 'class' the ship will undergo a series of surveys depending on the type of survey every certain amount of months.

However, ships may remain registered with the classification society for the lifetime of the vessel, until she is scrapped, sunk or wrecked.

Lloyds Registry was used for our company due to their recognition as one of the oldest classification societies and the most reliable. Lloyds holds the ships in their registry to one of the highest standards amongst classification societies, amongst the American Bureau of Shipping, Des Norske Veritas, Bureau Veritas and Nippon Kaiji Kyokai. To ensure ships are in 'class', surveys are conducted to assure quality and safety aboard the ships. Such surveys include, inspection of deck gear, cables, anchors, radio communication equipment, cargo gear, navigation, life saving equipment, navigation and load line. After successfully passing the survey and meeting the minimum requirements the ship receives a Load Line Certificate valid for a year, at which time, the ship will be in class for a full year before requiring another survey. Being in 'class' is extremely important since it is directly linked to the insurance of the vessel. A vessel which does not pass the survey inspection does not meet the minimum standards and the classification society can not assure the vessel is safe to sail on, which becomes flagged by the insurance company to either drop the ship as a client or drastically raise the ships premium.

Ships must agree to all rules set by the classification society. There may not be any modification or alteration in ship machinery or structure without notifying the classification society first. Any violation of the rules set forth by Lloyds Registry can result in having the ship being pulled from the classification society and no longer being in class.

4 - The Chinese Shipyards And Flags of Registry

4.1. - The structure of the Chinese shipbuilding Industry

In 1999, the state owned shipbuilding industry was split into two groups; the China State Shipbuilding Corporation (CSSC) and the China Shipbuilding Industry Corporation (CSIC). The CSIC became one of the major shipbuilding and ship repairing service providers in China, and employs a workforce of over 170 000. It produces around 1 million dwt shipbuilding output per annum. The CSIC possesses design, scientific and technological research institutes, and it's about both military and commercial ships, marine engineering and marine equipment.

The China State shipbuilding Corporation (CSSC) retained the balance of facilities and activities and remained as a state authorized investment institution, directly administered by the Chinese central government. There are 60 sole proprietorship enterprises and shareholding institutions under it, including some of the most renowned shipbuilding and ship repairing yards, research and design institutes, marine related equipment manufacturers and trading firms in China. The CSSC has the capacity to build most types of modern vessels, and can produce a wide spectrum of products, ranging from conventional oil tankers and bulk carriers through to vessels such as LNG carriers, VLCCs, chemical carriers, ro-ro passenger freight ships and offshore facilities.

Changjiang National Shipping Corp (CNSC) is one of the main domestic shipping companies in China. Another major grouping is the COSCO Shipyard

Group, which is a subsidiary of the China Ocean Shipping Company; the largest of the state-owned shipping operators. The China Shipping Industry Company (CIC), established in 1998, is a subsidiary of the China Shipping Group, which is itself the second largest of the state-owned shipping companies.

4.2. - Ownership Structure

The general Guidelines on Foreign Investment provide the basis for industrial competitiveness and environmental protection. In general terms, foreign participation is classified under one of four categories:

- Stimulation (may be eligible for special conditions or assistance);
- Permitted;
- Permitted with restrictions;
- Prohibited.

The four most common types of co-operation between Chinese and foreign companies are joint ventures, partnerships, Chinese owned companies (with at 51% Chinese ownership) and Chinese holding companies (with Chinese investors being the largest, even if not majority, stake holders).

4.3. - Workforce

China's main advantage on the world market is generally lower production costs, low cost labour. The low cost of labour is especially important for labor-intensive industry like shipbuilding. The wage costs represent roughly one third of the overall cost of constructing a vessel.

4.5. - Industry Performance

China has benefited from the very strong international shipbuilding market. We are going to examine with tables.

4.6. - World Share of Production

In 2007, China had position as the world's third-biggest shipbuilder. Chinese shipbuilders produced 10.4 million gt of new vessels in 2007, or around 18.4% of the world's total, Korea produced 35.7% and Japan 30.6% of the world total. These three countries represented account for 84% of the world total. In 2007, there was a significant difference between China and its competitor Japan and Korea. But if we examine the newbuilding orderbook table we can see the growth of Chinese shipbuilding industry.

World Shipbuilding Production 2007

Location of Build	Number of vessels	Output in m.GT	Percentage
Korea	425	20.20	35.68%
Japan	539	17.31	30.58%
China	643	10.41	18.39%
Germany	69	1.34	2.36%
Italy	25	0.70	1.23%
Denmark	4	0.85	1.50%
Croatia	25	0.69	1.21%
Chinese Taipei	16	0.66	1.16%
Poland	44	0.56	0.98%
Turkey	109	0.53	0.93%
Romania	43	0.43	0.75%
Philippines	10	0.36	0.63%
Rest of world	737	2.4	4.24%
Total	2,689	56.6	

Total World Newbuilding Orderbook (December 2007)

Location of Build	No of vessels	Million gt	% on gt	Million cgt ¹⁶
South Korea	2,242	126.53	38.37%	63.39
China	3,139	97.76	29.65%	50.22
Japan	1,495	63.81	19.35%	30.71
Philippines	116	5.16	1.56%	2.49
Germany	203	4.17	1.26%	3.78
Vietnam	206	3.20	0.97%	2.14
Romania	146	3.04	0.92%	2.12
Chinese Taipei	67	2.83	0.86%	1.68
India	246	2.61	0.79%	2.03
Italy	118	2.57	0.78%	2.95
Turkey	337	2.35	0.71%	2.34
Poland	122	2.03	0.61%	1.67
Croatia	69	1.99	0.6%	1.20
Denmark	22	1.46	0.44%	0.66
Rest of the World	1,527	10.19	3.09%	10.32
Total	10,055	329.7		177.7

At the end of 2007, South Korea had captured 126.5 million gt, equal to 38.37% of the total world orderbook. The Chinese shipbuilding industry's share of the orderbook also surpassed Japan. China had 29.65% and Japan had 19.35% of the total world orderbook.

² World Shipbuilding Statistics, Lloyd's Register – Fairplay 2007

The Orderbook of Chinese Shipyards (December 2007)

Type of Vessel	No	Million gt	% on gt	Million cgt
Bulk/Ore Carriers	1,201	52.431	54.0%	22.555
Crude Oil Tankers	165	15.611	16.1%	5.268
Container Vessels	496	13.075	13.5%	9.020
Oil Products Tankers	182	4.564	4.7%	2.505
General cargo ships	423	4.363	4.5%	4.034
Chemical/Oil Products Tankers	219	2.861	3.0%	2.201
Vehicle carriers	51	2.396	2.5%	1.415
LNG/LPG carriers	26	0.673	0.7%	0.659
Remainder	96	0.984	1.0%	1.148
Total	2,859	96.958		48.805

3

This table shows the details of the orderbook data for Chinese shipyards by vessel types. This shows bulk carriers has the main contribution and then crude oil tankers and container vessels. This table shows that the 1201 bulk/ore carriers on order totaled 52.43 million gt, accounting for 54% of the all orderbook, crude oil tankers and oil product tankers total accounted for 20.8%.

Moreover; this table shows that Chinese shipyards also taking order for more complex and technologically advanced vessels, such as vehicle carriers (51), LNG/LPG carriers (26). This shows Chinese shipbuilding industry's growth and development.

³ World Shipbuilding Statistics, Lloyd's Register – Fairplay 2007

4.7. - Panamanian Registry

4.7.1. - Economic Importance of Panama's Ship Registry

The ship registry contributes approximately \$55million; it represents 3% of the all-maritime sector for GDP. These \$55 million include rights fees charged for flagging, port concessions, consular fees, documentation services, admeasurements and appraisal, certificates, inspections, and examination to Panamanian marine licenses. On the other hand the legal, finance, insurance and inspection are related to the ship registry and they contribute \$200 million revenues.

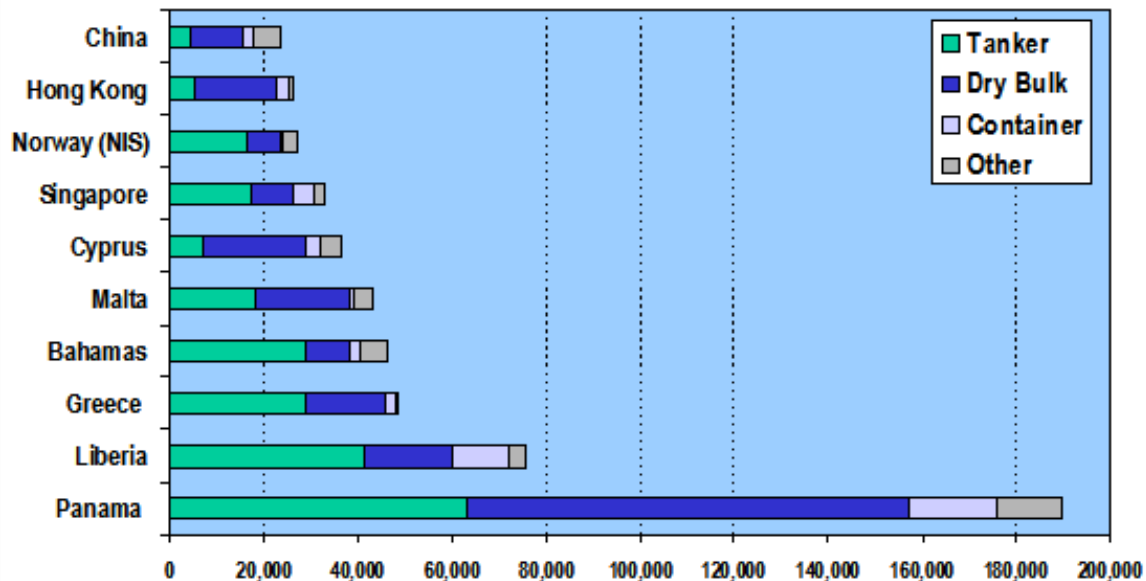
4.7.2. - History of Panama's Ship Registry

The establishment of Panamanian Law in 1925 made Panama's Vessel Registry the oldest open vessel registry in the world. This register allows registry under Panamanian flag of any vessel regardless of ownership, inside or outside Panama as long as it has a legal representative in the Republic of Panama. The Autoridad Maritima de Panama (AMP) is responsible for the administration and control of this registry. In order to assure compliance with international agreements and regulations, each year approximately 5,000 vessels are inspected through 400 agents in different parts of the world. In 1993, the Panamanian Ship Registry became the world's largest open registry, surpassing

Liberia. At the beginning of 2008 Panama has 6015 vessels 165.4 million GT and the largest merchant fleet in the world⁴.

⁴ 01/2009, Liberia drive to compete with the best , Scott Bergeron
[http://www.dmkn.de/1779/seeverkehr.nsf/833CDCB28BE7BE7FC125755300383F44/\\$File/liscr_liberia_fl_ag_state.pdf](http://www.dmkn.de/1779/seeverkehr.nsf/833CDCB28BE7BE7FC125755300383F44/$File/liscr_liberia_fl_ag_state.pdf)

4.7.3. - Advantages of Panama registry



5

Since its foundation over 80 years ago, the Panamanian Ship Registry has grown to become the world's largest registry, both in terms of gross tonnage and number of vessels flying the Panamanian flag.

These following are advantages of Panamanian registry.

1. Ownership

Any person or company is acceptable to register ships under the Panamanian flag. Also, non-resident shipping corporations don't pay income or withholding taxes.

⁵ Office of Maritime Administration, US Department of Transportation, http://www.marad.dot.gov/library_landing_page/data_and_statistics/Data_and_Statistics.htm

2. Vessel Eligibility

There is no minimum tonnage for registry and also almost any category of ships can be registered, from passenger ships to dredges and floating docks. For Panamanian registry there are no age restrictions; however vessels older than 20 years are subject to a special inspection. They will be issued a Provisional Patente and will have 6 months to complete the inspection.

3. Taxation Issues

Panamanian vessels are subject to the pay annual fee calculated on the basis of their tonnage. In order to avoid any administrative delay, The Consulate is appointed to collect those fees and is entitled to issue official receipts. On the other hand, especially one of the best provisions of Panamanian registry is nonresident shipping companies are not subject to pay taxes in Panama. Nonresident shipping companies pay taxes from the income that derives from activities within the national territory. It doesn't tax the income of vessel from international trade.

4. Technical Certificates

Ship owners who wish to transfer their vessels to the Panamanian registry are not required to have the vessels re-surveyed, provided the vessels possess valid safety certificates. Provisions are made to accept foreign tonnage certificates at the moment of registration; this obviates the necessity to have the

ship dry docked prior to the registration and consequently saves the ship owners considerable expenses.

5. Segumar

Segumar is New York representative office of Panama. Segumar has been providing assistance and advice on safety and technical matters concerning the Panamanian Registry since 1977 and also directs the inspection program of Panamanian flag vessels. It contains more than 525 inspectors are authorized to inspect Panamanian flag vessels in more than 400 ports worldwide.

6. Dual Registry

The "Dual Registry System" was established in Panama in 1973. Dual Registry System provides, a foreign vessel, bareboat chartered for a period of two years can be registered in Panama for the same period without losing its previous registration, and the opposite is also acceptable, it means from Panama to the other countries.

The "Dual Registry System" provides a great advantage for the Shipping community, especially for the shipowners who have no vessels under the open registry. The Dual Registry may be considered an answer to the problems that the European Shipowners faced with the high costs of operation represented by having vessels flying the flags of most European countries versus those under open registries.

The Dual Registry is no longer reciprocal; however, any vessel from any nationality may be able to apply to the Panamanian Registry if the register of her home country allows it.

7. Standards

Panama's Maritime Tribunal is recognized worldwide for its efficiency and compliance with global maritime standards. This facilitates maritime legal transactions, no matter where the vessel lying. The Court can handle any maritime dispute, including claims, sequesters, and labor matters. The Court is available 24 hours a day, 365 days a year. Panama has an extensive network of worldwide maritime consulates. They are located in major ports, which facilitate maritime transactions of Panamanian flagged vessels. Ship registry can be conveniently handled via this network.

Panama's time-tested corporate and ship mortgage laws are among the world's best, in terms of stability, judicial protection, and regulatory protection. Panama's Registry is one of the world's best records in environmental and safety compliance, and in vessel loss prevention. Panama has over 1,000 inspectors in over 300 ports, in order to insure compliance worldwide.

8. Fleet Discounts

The Shipping Department is authorized to provide special discounts up to 60% in registration fees to any shipowner, or more than one shipowner to be part of the same financial group, a 20% discount on registration fees is offered

to fleets comprising 5-15 ships; a 35% discount to fleets of 16-50 vessels; and a 60% discount to fleets of 51 or more ships⁶. In addition to the discounts any shipowner, or group of shipowners from the same financial group, whose vessels represent tonnage of more than 100,000 tons may obtain from the Shipping Department a discount of up to 50% in Annual Tax beside in registration fees.

9. Transfer of Fleet Discounts

Another fleet transfer discounts is if any shipowner, or shipowners from the same financial group, transfer to Panama flag, a group of vessels which represent tonnage of more than 100,000 tons, they may obtain a discount on registration fees from the Shipping Department of Panama. Also if they pay registration fees to transfer to the Panama flag, Shipping department of Panama provides a discount if shipowner(s) guarantee(s) to maintain the vessels in Panama for a minimum term of 4 years.

4.7.4.- Panamanian Registry Provisions for Nautilus

Nautilus is a Turkish company. Panamanian registry allows non-residence companies to not pay taxes in Panama. Under Panamanian registry non-residence companies pay taxes from the income which is in the national territory, not from international trades.

⁶ November 14,2008,PANAMA PURGES AGEING DETAINEES,FAIRPLAY INTERNATIONAL SHIPPING WEEKLY By Michele Labrut, http://www.pmalawyers.com/b_letter08_23.html

Nautilus currently has 6 vessels and three of them use different registry, in the future Nautilus may be transferring those three vessels to Panamanian registry to take advantage of fleet discount for 20% discount on registration fee. Panamanian registry provides not to re-survey vessels foreign tonnage certificates so ship dry docking is not necessary, this makes process easier. Panamanian registry provides discount if Nautilus pays registration fee to transfer to Panamanian flag to previous country of registry. Panamanian registry also accepts dual registry system, therefore if our company charters vessels under Panamanian registry to some charterer, the charterer has a right to register to another country.

4.8. - Liberian Registry

4.8.1. - Advantage of Liberian Registry

Here are some reasons that make Liberia second largest fleet in the world. At the beginning of 2008, Panama has 6,015 (165.4 mgt) and Liberia has 1,804 (75.3 mgt) vessels and these are the top two country about ship registry⁷.

1. Vessel Construction

Vessels can be constructed by any nation. Also the supplies for construction and outfitting can be from any nation.

2. Vessel Manning

There are no restrictions on the nationality of crew. Many national registries require manning by citizens of the country of registry. Shipowners can avoid higher wages, inflated labour cost and excessive bureaucracy.

⁷ 31/12/2007, Liberia's drive to compete with the best,
[http://www.dmkn.de/1779/seeverkehr.nsf/833CDCB28BE7BE7FC125755300383F44/\\$File/liscr_liberia_fl_ag_state.pdf](http://www.dmkn.de/1779/seeverkehr.nsf/833CDCB28BE7BE7FC125755300383F44/$File/liscr_liberia_fl_ag_state.pdf)

3. Ship Financing

The Liberian Registry is internationally recognized and acceptable to banks, it provides opportunity to get favorable financing.

4. Ease of Registration

The registration formalities are designed to meet international standards for safety and documentation. Registry staff is available to assist registration process and procedures. Bareboat registration in and out is permitted and no restraints to transfer out of the register.

5. Tax Sensible Jurisdiction

Vessels are taxed annually based on the net tonnage of the vessel. Similarly, Liberian Corporations have a fixed annual tax.

6. Double Taxation Treaties

Liberia established treaties to avoid double taxation with most countries.

7. Vessel Surveys

Qualifying classification societies are not restricted to a particular national society. This provides cost savings, reduction of bureaucracy and operational/scheduling flexibility for shipowners.

8. Customer Service

A U.S. owned administers the Liberian Registry and operated company (LISCR) that has industry professionals who understand the business of shipping. They make an investment in technology to ensure superior service and convenience. Also, the Registry's offices located in major shipping centers, there is also a network of over 220 inspectors, who can attend vessels when needed.

9. Safety

Vessel safety is a top priority for the Registry. Liberia has a worldwide network of specialty-trained inspectors who can perform. Liberia has Harmonized Audits to ensure vessel compliance with both the International Safety Management (ISM) and International Ship and Port Security (ISPS) Codes.

10. Security

The Liberian Registry has supported development and implementation of the IMO's ISPS Code. Liberia believes in a practical and low-cost approach to ensuring security conscious shipping. A network of approximately 100 security inspectors attends vessels when needed.

11. Adoptions and Enforcement of International Regulations

The International Maritime Organization and the International Labor Organization are important factors for respectable ship registries. Liberia is known for its international involvement in ensuring the development of practical new regulations when necessary.

12. Liberian Shipowners' Council (LSC)

Liberia is one of the few open registries with an independent shipowners' council. The LSC provides member shipowners to monitor and address problems facing the industry and to share and exchange information and ideas. The LSC is a member of the International Chamber of Shipping, and the International Shipping Federation.

4.8.2. - Liberian Registry Provisions for Nautilus

Under Liberian registry, vessels can be constructed by any nation so Nautilus can take advantage of the low cost construction from other nations. Liberian registry provides vessel manning; crew can be from any nation. Nautilus can avoid paying higher wages, especially during this current crisis. Companies have to be more careful of high cost including labor. Liberian registry provides bareboat registration, in and out is permitted. Liberian registry has double tax treaties with most countries to avoid double taxation. Liberia has Harmonized Audits to ensure vessel compliance with both the International Safety Management (ISM) and International Ship and Port Security (ISPS) Codes, and these are very important for Nautilus' vessels.

5 - Law and Time Charter

5.1 - Shelltime 4 Charter Party In Trading And Shipping

As the owner of the Nautilus Shipping Inc., we entered into a tanker time charter party on an amended SHELLTIME4⁸ form for a period of six years. Shelltime 4 is most widely used and it is used as the model tanker form. This contract has usually been treated as the industry standard. Its clauses form the basis of large number of oil tanker charters. Long-term charters are a more successful strategy than the spot market for owners. The fact that we posted a good profit, despite the current market situation, is a consequence of our strategy to sign our vessels to long contracts.

Brokers are an essential part of the operation of the tanker market. They have built up the strong connections and trust over a number of years between oil companies and the shipowner. They watch for suitable business, perhaps time charter for a long short period depending on market level and how they read the market over the next few months or for a voyage loading from the anticipated discharge port.⁹

⁸ Kimball, John D., Terence Coghlin, Andrew W. Baker, Julian Kenny. Time Charters. 5th Ed. United Kingdom: Informa Publishing. June 2003. Pg. 224

⁹ Wood, Philip J. Tanker Chartering. 1st Ed. London: Institute of Chartered Shipbrokers, 2000. pg 43-45

Galbraith's Ltd. Company provides a shipbroking services through tanker chartering and sale& purchase for Nautilus Shipping Inc for ten years. Galbraith's ltd is a leading London shipbroker and international shipping consultant. The company is a member of the Baltic Exchange, BIMCO, Intertanko, the Worldscale Association and is a company member of the Institute of Chartered Shipbrokers. The company is also closely involved in the work of both the London Tanker Brokers' Panel and the Ship Valuation Panel Ltd. Its headquarters are in London and offices in Shanghai, Kuala Lumpur and New York.¹⁰ Galbraith's Ltd. has been the synonym of successful tanker chartering conduct, characterised by professionalism. Their broking services combined with true market knowledge and technologically sophisticated equipment provided our company to trade with one of the most important oil and gas producers in the Libyan oil industry.

Nautilus Shipping Inc. vessels carry a cargo of crude oil from Libya to South Korea. These three vessels' daily freights were mentioned in the finance above. The vessels will be complied with the Shelltime 4 charter party form that is amended by the parties for six years. In order to exemplify Shelltime 4 charter party, it has been concerted to the vessel Kemal 3 as the following:

¹⁰ Galbraith's International Shipbrokers. 27 Feb. 2009. Galbraith's. 03 March 2009
<<http://www.galbraiths.co.uk/content/home/>>.

5.2.- Time Charter Party

SHELLTIME 4
Issued December 1984

Time Charter Party
Istanbul,

IT IS THIS DAY AGREED between: (A) Nautilus Shipping Inc. in its capacity as the owner of the tanker KEMAL 3 (the "*Vessel*") of Istanbul (hereinafter referred to as "*Owners*"), (the vessel") described as per Clause 1 hereof; and (B) Zueitina Oil Company Charterer Co. of Libya (hereinafter referred to as "*Charterers*");

Description and Condition of Vessel

1. At the date of delivery of the vessel under this charter and throughout the charter period:
 - (a) the vessel shall be classed by a Classification Society which is a member of the International Association of Classification Societies; classification will be ABS
 - (b) the vessel shall be in every way fit to carry crude oil.
 - (c) the vessel shall be tight, staunch, strong, in good order and condition, and in every way fit for the service, with her machinery, boilers, hull and other equipment (including but not limited to hull stress calculator, radar, computers and computer systems) in a good and efficient state;
 - (d) their tanks, valves and pipelines shall be oil-tight;
 - (e) the vessels shall be in every way fitted for burning, in accordance with the grades specified in Clause 29 hereof; IFO 380 CST RMG 380 ISO 8217:2005 (E) and ISO DMA 8217:2005 – Charterers will endeavor to procure IFO with maximum 3.0% sulphur, provided it is readily available within the port the Tug would normally bunker and without incremental time or cost to Charterers, as compared to IFO that would otherwise be supplied with maximum 4.5% sulphur content, or as required by law. Charterers have no obligation whatsoever to deviate the Vessels for the purpose of procuring IFO 3.0% maximum sulphur unless required to comply with applicable law(s).
 - (i) at sea, fuel oil for main propulsion and fuel oil/marine diesel oil* for auxiliaries;
 - (ii) in port, fuel oil/marine diesel oil* for auxiliaries;
 - (f) the vessels shall comply with the regulations in force so as to enable them to pass through the Suez and Panama Canals by day and night without delay;

(g) they shall have on board all certificates, documents and equipment required from time to time by any applicable law to enable them to perform the charter service without delay;

(h) they shall comply with the description in the OCIMF Harmonized Vessel Particulars Questionnaire provided however that if there is any conflict between the provisions of this questionnaire and any other provision, including this Clause 1, of this charter such other provisions shall govern;

(i) the ownership structure, flag, registry, and classification society and management company of the Vessel shall not be changed, without approval of Charterer, which shall not be unreasonably withheld;

Safety Management

(j) Owner will operate:

(i) a safety management system certified to comply with the International Safety Management Code ("*ISM Code*") for the Safe Operation of Ships and for Pollution Prevention;

(ii) a documented safe working procedures system (including procedures for the identification and mitigation of risks);

(iii) a documented environmental management system;

(iv) documented accident/incident reporting system compliant with flag state requirements;

(k) Owners shall submit to Charterers a monthly written report detailing all accidents/incidents and environmental reporting requirements;

(l) Owners shall maintain Health Safety Environmental ("*HSE*") records sufficient to demonstrate compliance with the requirements of their HSE system and of this charter. Charterers reserve the right to confirm compliance with HSE requirements by audit of Owners.

(m) Owners will arrange at their expense for a SIRE inspection to be carried out at intervals of six months plus or minus thirty days.

Shipboard Personnel and their Duties

2. (a) At the date of delivery of the vessels under this charter and throughout the charter period:

(i) they shall have a full and efficient complement of master, officers and crew for a vessel of their tonnage, who shall in any event be not less than the number required by the laws of the flag state and who shall be trained to operate the vessel and her equipment competently and safely;

(ii) all shipboard personnel shall hold valid certificates of competence in accordance with the requirements of the law of the flag state;

(iii) all shipboard personnel shall be trained in accordance with the relevant provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1995 or any additions, modifications or subsequent versions thereof;

(iv) there shall be on board sufficient personnel with a good working knowledge of the English language to enable cargo operations at loading and discharging places to be carried out efficiently and safely and to enable communications between the vessel and those loading the vessel or accepting discharge there from to be carried out quickly and efficiently;

(v) the terms of employment of the vessel's staff and crew will always remain acceptable to The International Transport Worker's Federation and the vessels will at all times carry a Blue Card;

(vi) the nationality of the vessel's officers given in the OCIMF Vessel Particulars Questionnaire referred to in Clause 1(h) will not change without Charterer's prior agreement.

(b) Owners guarantee that throughout the charter service the master shall with the vessel's officers and crew, unless otherwise ordered by Charterer;

(i) prosecute all voyages with the utmost despatch;

(ii) render all customary assistance; and

(iii) load and discharge cargo as rapidly as possible when required by Charterer or its agent to do so, by night or by day, but always in accordance with the laws of the place of loading or discharging.

Duty to Maintain

3. (a) Throughout the charter service Owner shall, whenever the passage of time, wear and tear or any event (whether or not coming within Clause 27 hereof) requires steps to be taken to maintain or restore the conditions stipulated in Clauses 1 and 2(a), exercise due diligence so to maintain or restore the vessel.

(b) If at any time whilst the vessel is on hire under this charter the vessel fails to comply with the requirements of Clauses 1, 2(a) or 10 then hire shall be reduced to the extent necessary to indemnify Charterer for such failure. If and to the extent that such

failure affects the time taken by the vessel to perform any services under this charter, hire shall be reduced by an amount equal to the value, calculated at the rate of hire, of the time so lost.

Any reduction of hire under this sub-Clause (b) shall be without prejudice to any other remedy available to Charterer, but where such reduction of hire is in respect of time lost, such time shall be excluded from any calculation under Clause 24.

(c) If Owners are in breach of their obligations under Clause 3(a), Charterer may so notify Owner in writing and if, after the expiry of 30 days following the receipt by Owner of any such notice, Owners have failed to demonstrate to Charterer's reasonable satisfaction the exercise of due diligence as required in Clause 3(a), the vessel shall be off-hire, and no further hire payments shall be due, until Owner has so demonstrated that it is exercising such due diligence.

(d) Owner shall advise Charterer immediately, in writing, should the vessel fail an inspection by, but not limited to, a governmental and/or port state authority, and/or terminal and/or major charterer of similar tonnage. Owner shall simultaneously advise Charterer of their proposed course of action to remedy the defects which have caused the failure of such inspection.

(e) If, in Charterer reasonably held view:

- (i) failure of an inspection, or,
- (ii) any finding of an inspection,

referred to in Clause 3(d), prevents normal commercial operations then Charterers have the option to place the vessel off-hire from the date and time that the vessel fails such inspection, or becomes commercially inoperable, until the date and time that the vessel passes a re-inspection by the same organization, or becomes commercially operable, which shall be in a position no less favorable to Charterer than at which they went off-hire.

(f) Furthermore, at any time while the vessel is off-hire under this Clause 3 (with the exception of Clause 3(e)(ii)), Charterer has the option to terminate this charter by giving notice in writing with effect from the date on which such notice of termination is received by Owners or from any Later date stated in such notice. This sub-Clause (f) is without prejudice to any rights of Charterer or obligations of Owner under this charter or otherwise (including without limitation Charterer's rights under Clause 21 hereof).

Period, Trading Limits and Safe Places

4. (a) Owner agrees to let and Charterer agrees to hire the vessel for a period commencing on or about January 1, 2012 ending on or about January 1, 2018 plus or minus **30** days in Charterer's option commencing from the time and date of delivery of the vessel, for the purpose of carrying all lawful merchandise (subject always

to Clause 28) including in particular crude oil in any part of the world, as Charterer shall direct, subject to the limits of the current British Institute Warranties and any subsequent amendments thereof, notwithstanding the foregoing, but subject to Clause 35, Charterer may not order the vessel to ice-bound waters or to any part of the world outside such limits.

(b) Any time during which the vessel is off-hire under this charter may be added to the last firm charter period in Charterer's option up to the total amount of time spent off-hire. In such cases the rate of hire will be that prevailing at the time the vessel would, but for the provisions of this Clause, have been redelivered.

(c) Charterer shall use due diligence to ensure that the vessel is only employed between and at safe places (which expression when used in this charter shall include ports, berths, wharves, docks, anchorages, submarine lines, alongside vessels or lighters, and other locations including locations at sea) where she can safely lie always afloat. Notwithstanding anything contained in this or any other clause of this charter, Charterer does not warrant the safety of any place to which they order the vessel and shall be under no liability in respect thereof except for loss or damage caused by their failure to exercise due diligence as aforesaid. Subject as above, the vessel shall be loaded and discharged at any places as Charterer may direct, provided that Charterer shall exercise due diligence to ensure that any ship-to-ship transfer operations shall conform to standards not less than those set out in the latest published edition of the ICS/OCIMF Ship-to-Ship Transfer Guide.

(d) Unless otherwise agreed, the vessel shall be delivered by Owner dropping outward pilot at a port chosen by Charterer and redelivered to Owner dropping outward pilot at a port chosen by Owners.

(e) The vessel will deliver with last cargo(es) of **crude oil** and will redeliver with last cargo(es) of **crude oil**.

(f) Owner is required to give Charterer **5** days prior notice of delivery and Charterer is required to give Owner **5** days prior notice of redelivery.

Laydays/Cancelling

5. The vessel shall not be delivered to Charterer before January 1, 2012 and Charterer shall have the option of canceling this charter if the vessel is not ready and at their disposal on or before.

Owners to Provide

6. Owners undertake to provide and to pay for all provisions, wages (including but not limited to all overtime payments), and shipping and discharging fees and all other expenses of the master, officers And crew; also, except as provided in Clauses 4 and 34 hereof, for all insurance on the vessel, for all Deck, cabin and engine-room stores, and for water (limited to crew only); for all drydocking, overhaul, maintenance and repairs to the vessel. Owners' obligations under this Clause 6 extend to all liabilities

for customs or import duties arising at any time during the performance of this charter in relation to the personal effects of the master, officers and crew, and in relation to the stores, provisions and other matters aforesaid which Owners are to provide and pay for and Owners shall refund to Charterers any sums Charterers or their agents may have paid or been compelled to pay in respect of any such liability. Any amounts allowable in general average for wages and provisions and stores shall be credited to Charterers insofar as such amounts are in respect of a Period when the vessel is on-hire.

Charterers to Provide

7. (a) Charterer shall provide and pay for all fuel (except for fuel used for domestic services), towage and pilotage and shall pay agency fees, port charges, commissions, expenses of loading and unloading cargoes, canal dues, and tax/dues on cargo/freight and all charges other than those payable by Owners in accordance with Clause 6 hereof, provided that all charges for the said items shall be for Owners' account when such items are consumed, employed or incurred for Owners' purposes or while the vessel is off-hire (unless such items reasonably relate to any service given or distance made good and taken into account under Clause 21 or 22); and provided further that any fuel used in connection with a general average sacrifice or expenditure shall be paid for by Owners.

Rate of Hire

8. Subject as herein provided, Charterer shall pay for the use and hire of the vessel at the rate of United States Dollars **\$54,027.7778** per a day for KEMAL 3, , from the time and date of their delivery (local time) to Charterer until the time and date of redelivery (local time) to Owner. This clause may alter by the contracted parties in terms of their profitability in the time of charter party.

Payment of Hire

9. Subject to Clause 3 (c) and 3 (e), payment of hire shall be made in immediately available funds

to: **Garantibank**
Istanbul, Turkey
Account: ABA #042000314
For Credit to Account No. 09990203987
in the name of Nautilus Shipping INC.

in United States Dollars per month in advance, less:

- (i) any hire paid which Charterer reasonably estimate to relate to off-hire periods, and,
- (ii) any amounts disbursed on Owner's behalf, any advances and commission therein, and charges which are for Owner's account pursuant to any provision hereof, and;

(iii) any amounts due or reasonably estimated to become due to Charterer under Clause 3(c) or 24 hereof,

any such adjustments to be made at the due date for the next monthly payment after the facts have been ascertained. Charterer shall not be responsible for any delay or error by Owner's bank in crediting Owners' account provided that Charterer has made proper and timely payment. In default of such proper and timely payment:

(a) Owners shall notify Charterer of such default and Charterer shall within seven days of receipt of such notice pay to Owner the amount due, including interest, failing which Owners may withdraw the vessel from the service of Charterer without prejudice to any other rights Owner may have under this charter or otherwise; and;

Space Available to Charterers

10. The whole reach, burthen and decks on the vessel shall be at Charterers' disposal, reserving only proper and sufficient space for the vessel's master, officers, crew, tackle, apparel, furniture, provisions and stores, provided that the weight of stores on board shall not, unless specially agreed, exceed **5** tonnes at any time during the charter period.

Segregated Ballast

11. In connection with the Council of the European Union Regulation on the Implementation of IMO Resolution A747(18) Owners will ensure that the following entry is made on the International Tonnage Certificate (1969) under the section headed "Remarks":

"The segregated ballast tanks comply with the Regulation 13 of Annex 1 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, and the total tonnage of such tanks exclusively used for the carriage of segregated water ballast is **as required** The reduced gross tonnage which should be used for the calculation of tonnage based fees **has been provided to charterer.**

Instructions and Logs

12. Charterer shall from time to time give the master all requisite instructions and sailing directions, and the master shall keep a full and correct log of the voyage or voyages, which Charterer or their agents may inspect as required. The master shall when required furnish Charterer or their agents with a true copy of such log and with properly completed loading and discharging port sheets and voyage reports for each voyage and other returns as Charterer may require. Charterer shall be entitled to take copies at Owners' expense of any such documents which are not provided by the master.

Bills of Lading

13. (a) The master (although appointed by Owner) shall be under the orders and direction of Charterer as regards employment of the vessel, agency and other arrangements, and shall sign Bills of Lading as Charterer or their agents may direct (subject always to Clauses 35(a) and 40) without prejudice to this charter. Charterer hereby indemnifies Owner against all consequences or liabilities that may arise;

(i) from signing Bills of Lading in accordance with the directions of Charterer or their agents, to the extent that the terms of such Bills of Lading fail to conform to the requirements of this charter, or (except as provided in Clause 13(b) from the master otherwise complying with Charterer's or their agents' orders;

(ii) from any irregularities in papers supplied by Charterer or their agents.

(b) If Charterer by telex, facsimile or other form of written communication that specifically refers to this Clause request Owner to discharge a quantity of cargo either without Bills of Lading and/or at a discharge place other than that named in a Bill of Lading and/or that is different from the Bill of Lading quantity, then Owner shall discharge such cargo in accordance with Charterer's instructions in consideration of receiving the following indemnity which shall be deemed to be given by Charterer on each and every such occasion and which is limited in value to 200% of the CIF value of the cargo carried on board;

(i) Charterer shall indemnify Owner and Owner's servants and agents in respect of any liability loss or damage of whatsoever nature (including legal costs as between attorney or solicitor and client and associated expenses) which Owner may sustain by reason of delivering such cargo in accordance with Charterer's request.

(ii) If any proceeding is commenced against Owner or any of Owner's servants or agents in connection with the vessel having delivered cargo in accordance with such request, Charterer shall provide Owners or any of Owners' servants or agents from time to time on demand with sufficient funds to defend the said proceedings.

(iii) If the vessel or any other vessel or property belonging to Owners should be arrested or detained, or if the arrest or detention thereof should be threatened, by reason of discharge in accordance with Charterer instruction as aforesaid, Charterer shall provide on demand such bail or other security as may be required to prevent such arrest or detention or to secure the release of such vessel or property and Charterer shall indemnify Owners in respect of any loss, damage or expenses caused by such arrest or detention whether or not same may be justified.

(iv) charterer shall, if called upon to do so at any time while such cargo is in Charterer's possession, custody or control, redeliver the same to Owner.

(v) As soon as all original Bills of Lading for the above cargo which name as discharge port the place where delivery actually occurred shall have arrived and/or come into Charterer' possession, Charterer shall produce and deliver the same to Owner whereupon Charterer' liability hereunder shall cease.

Provided however, if Charterer has not received all such original Bills of Lading by 24 hours on the day 36 calendar months after the date of discharge, that this indemnity shall terminate at that time unless before that time Charterer has received from Owner written notice that:

a) Some person is making a claim in connection with Owner delivering cargo pursuant to Charterer request or,

b) Legal proceedings have been commenced against Owner and/or carriers and/or Charterer and/or any of their respective servants or agents and/or the vessel for the same reason.

When Charterer have received such a notice, then this indemnity shall continue in force until such claim or legal proceedings are settled. Termination of this indemnity shall not prejudice any legal rights a party may have outside this indemnity.

(vi) owner shall promptly notify Charterer if any person (other than a person to whom Charterer ordered cargo to be delivered) claims to be entitled to such cargo and/or if the vessel or any other property belonging to Owners is arrested by reason of any such discharge of cargo.

(vii) This indemnity shall be governed and construed in accordance with English Law.

(c) Owners warrant that the Master will comply with orders to carry and discharge against one or more Bills of Lading from a set of original negotiable Bills of Lading should Charterer so require.

Conduct of Vessel's Personnel

14. If Charterer complains of the conduct of the master or any of the officers or crew, Owners shall immediately investigate the complaint. If the complaint proves to be well founded, Owners shall, without delay, make a change in the appointments and Owners shall in any event communicate the result of their investigations to Charterer as soon Bunkers at Delivery and Redelivery.

15. Charterer shall accept and pay for all bunkers on board at the time of delivery, and Owners shall on redelivery (whether it occurs at the end of the charter or on the earlier termination of this charter) accept and pay for all bunkers remaining on board, at the price actually paid, on a "first-in-first-out" basis. Such prices are to be supported by paid invoices.

Notwithstanding anything contained in this charter all bunkers on board the vessel shall, throughout the duration of this charter, remain the property of Charterer and can only be purchased on the terms specified in the charter at the end of the charter period or, if earlier, at the termination of the charter.

Stevedores, Pilots, Tugs

16. Stevedores, when required, shall be employed and paid by Charterer, but this shall not relieve Owner from responsibility at all times for proper stowage, which must be controlled by the master who shall keep a strict account of all cargo loaded and discharged. Owners hereby indemnify Charterer, their servants and agents against all losses, claims, responsibilities and liabilities arising in any way whatsoever from the employment of pilots, tugboats or stevedores, who although employed by Charterer shall be deemed to be the servants of and in the service of Owner and under their instructions (even if such pilots, tugboat personnel or stevedores are in fact the servants of Charterer their agents or any affiliated company); provided, however, that:

(a) the foregoing indemnity shall not exceed the amount to which Owner would have been entitled to limit their liability if they had themselves employed such pilots, tugboats or stevedores, and;

(b) Charterer shall be liable for any damage to the vessel caused by or arising out of the use of stevedores, fair wear and tear excepted, to the extent that Owner IS unable by the exercise of due diligence to obtain redress therefore from stevedores.

Sub-letting/Assignment/Novation

18. Charterer may sub-let the vessel, but shall always remain responsible to Owners for due fulfilment of this charter.

Final Voyage

19. If when a payment of hire is due hereunder Charterer reasonably expect to redeliver the vessel before the next payment of hire would fall due, the hire to be paid shall be assessed on Charterer's reasonable estimate of the time necessary to complete Charterer's programme up to redelivery, and from which estimate Charterer may deduct amounts due or reasonably expected to become due for:

(a) disbursements on Owner's behalf or charges for Owner's account pursuant to any provision hereof, and;

(b) bunkers on board at redelivery pursuant to Clause 15.

Promptly after redelivery any overpayment shall be refunded by Owner or any underpayment made good by Charterer.

If at the time this charter would otherwise terminate in accordance with Clause 4 the vessel is on a ballast voyage to a port of redelivery or is upon a laden voyage, Charterer shall continue to have the use of the vessel at the same rate and conditions as stand herein for as long as necessary to complete such ballast voyage, or to complete such laden voyage and return to a port of redelivery as provided by this charter, as the case may be.

Loss of Vessel

20. Should the vessel be lost, this charter shall terminate and hire shall cease at noon (GMT) on the day of the loss; should the vessel be a constructive total loss, this charter shall terminate and hire shall cease at noon on the day on which the vessel's underwriters agree that the vessel is a constructive total loss; should the vessel be missing, this charter shall terminate and hire shall cease at noon on the day on which she was last heard of. Any hire paid in advance and not earned shall be returned to Charterer and Owner shall reimburse Charterer for the value of the estimated quantity of bunkers on board at the time of termination, at the price paid by Charterer at the last bunkering port.

Off-hire

21. (a) On each and every occasion that there is loss of time (whether by way of interruption in the vessel's service or, from reduction in the vessel's performance, or in any other manner):

(i) due to deficiency of personnel or stores; repairs; gas-freeing for repairs; time in and waiting to enter dry dock for repairs; breakdown (whether partial or total) of machinery, boilers or other parts of the vessels or their equipment (including without limitation tank coatings); overhaul, maintenance or survey; collision, stranding, accident or damage to the vessel; or any other similar cause preventing the efficient working of the vessel; and such loss continues for more than three consecutive hours (if resulting from interruption in the vessel's service) or cumulates to more than three hours (if resulting from partial loss of service); or;

(ii) due to industrial action, refusal to sail, breach of orders or neglect of duty on the part of the master, officers or crew; or;

(iii) for the purpose of obtaining medical advice or treatment for or landing any sick or injured person (other than a Charterer's representative carried under Clause 17 hereof) or for the purpose of landing the body of any person (other than a Charterer's representative), and such loss continues for more than three consecutive hours; or;

(iv) due to any delay in quarantine arising from the master, officers or crew having had communication with the shore at any infected area without the written consent or instructions of Charterer or its agents, or to any detention by customs or other authorities caused by smuggling or other infraction of local law on the part of the master, officers, or crew; or;

(v) due to detention of the vessel by authorities at home or abroad attributable to legal action against or breach of regulations by the vessel, the vessel's owners, or Owner (unless brought about by the act or neglect of Charterer); then; without prejudice to Charterer's rights under Clause 3 or to any other rights of Charterer hereunder, or otherwise, the vessel shall be off-hire from the commencement of such loss of time until she is again ready and in an efficient state to resume her service from a position not less favorable to Charterer than that at which such loss of time commenced; provided, however, that any service given or distance made good by the vessel whilst off-hire shall be taken into account in assessing the amount to be deducted from hire.

(b) If the vessels fail to proceed at any guaranteed speed pursuant to Clause 24, and such failure arises wholly or partly from any of the causes set out in Clause 21(a) above, then the period for which the vessels shall be off-hire under this Clause 21 shall be the difference between:

(i) the time the vessel would have required to perform the relevant service at such guaranteed speed, and;

(ii) the time actually taken to perform such service (including any loss of time arising from interruption in the performance of such service).

For the avoidance of doubt, all time included under (ii) above shall be excluded from any computation under Clause 24 .

(c) Further and without prejudice to the foregoing, in the event of the vessel deviating (which expression includes without limitation putting back, or putting into any port other than that to which they are bound under the instructions of Charterer) for any cause or purpose mentioned in Clause 21(a) , the vessel shall be off-hire from the commencement of such deviation until the time when she is again ready and in an efficient state to resume their services from a position not less favorable to Charterer than that at which the deviation commenced, provided, however, that any service given or distance made good by the vessels whilst so off-hire shall be taken into account in assessing the amount to be deducted from hire. If the vessels, for any cause or purpose mentioned in Clause 21(a) , puts into any port other than the port to which they are bound on the instructions of Charterer, the port charges, pilotage and other expenses at such port shall be borne by Owner. Should the vessel be driven into any port or anchorage by stress of weather hire shall continue to be due and payable during any time lost thereby.

(d) If the vessel's flag state becomes engaged in hostilities, and Charterer in consequence of such hostilities find it commercially impracticable to employ the vessel and have given Owner written notice thereof then from the date of receipt by Owner of such notice until the termination of such commercial impracticability the vessel shall be off-hire and Owner shall have the right to employ the vessel on their own account.

(e) Time during which the vessel is off-hire under this charter shall count as part of the charter period except where Charterer declare their option to add off-hire periods under Clause 4(b)).

(f) All references to "time" in this charter party shall be references to local time except where otherwise stated.

Periodical Drydocking

22. (a) Owner has the right and obligation to drydock the vessel at regular intervals **as required** On each occasion Owner shall propose to Charterer a date on which they wish to drydock the vessel, not less than **30 days** before such date and Charterer shall offer a port for such periodical drydocking and shall take all reasonable steps to make the vessel available as near to such date as practicable.

Owner shall put the vessel in drydock at their expense as soon as practicable after Charterer place the vessels at Owner's disposal clear of cargo other than tank washings and residues. Owner shall be responsible for and pay for the disposal into reception facilities of such tank washings and residues and shall have the right to retain any monies received therefore, without prejudice to any claim for loss of cargo under any Bill of Lading or this charter.

(b) If a periodical drydocking is carried out in the port offered by Charterer (which must have suitable accommodation for the purpose and reception facilities for tank washings and residues), the vessel shall be off-hire from the time they arrive at such port until drydocking is completed and they are in every way ready to resume Charterer's service and is at the position at which they went off-hire or a position no less favorable to Charterer, whichever they first attain. However;

(i) provided that Owner exercises due diligence in gas-freeing, any time lost in gas-freeing to the standard required for entry into drydock for cleaning and painting the hull shall not count as off-hire, whether lost on passage to the drydocking port or after arrival there (notwithstanding Clause 21), and;

(ii) any additional time lost in further gas-freeing to meet the standard required for hot work or entry to cargo tanks shall count as off-hire, whether lost on passage to the drydocking port or after arrival there.

Any time which, but for sub-Clause (i) above, would be off-hire, shall not be included in any calculation under Clause 24.

The expenses of gas-freeing, including without limitation the cost of bunkers, shall be for Owner's account.

(c) If Owner requires the vessel, instead of proceeding to the offered port, to carry out periodical drydocking at a special port selected by them, the vessel shall be

off-hire from the time when she is released to proceed to the special port until she next presents for loading in accordance with Charterer's instructions, provided, however, that Charterer shall credit Owner with the time which would have been taken on passage at the service speed had the vessels not proceeded to drydock. All fuel consumed shall be paid for by Owner but Charterer shall credit Owner with the value of the fuel which would have been used on such notional passage calculated at the guaranteed daily consumption for the service speed, and shall further credit Owner with any benefit they may gain in purchasing bunkers at the special port.

(d) Charterer shall, insofar as cleaning for periodical drydocking may have reduced the amount of tank-cleaning necessary to meet Charterer's requirements, credit Owner with the value of any bunkers which Charterer calculates to have been saved thereby, whether the vessels drydock at an offered or a special port.

Ship Inspection

23. Charterer shall have the right at any time during the charter period to make such inspection of the vessel as they may consider necessary. This right may be exercised as often and at such intervals as Charterer in their absolute discretion may determine and whether the vessel is in port or on passage. Owner affording all necessary co-operation and accommodation on board provided, however:

(a) that neither the exercise nor the non-exercise, nor anything done or not done in the exercise or non-exercise, by Charterer of such right shall in any way reduce the master's or Owner's authority over, or responsibility to Charterer or third parties for, the vessel and every aspect of her operation, nor increase Charterer's responsibilities to Owner or third parties for the same; and;

(b) that Charterer shall not be liable for any act, neglect or default by themselves, their servants or agents in the exercise or non-exercise of the aforesaid right.

Detailed Description and Performance

24. Owner guarantees that the speed and consumption of the vessel shall be as agreed with Charterer.

Salvage

25. Subject to the provisions of Clause 21 hereof, all loss of time and all expenses (excluding any damage to or loss of the vessel or tortuous liabilities to third parties) incurred in saving or attempting to save life or in successful or unsuccessful attempts at salvage shall be borne equally by Owner and Charterer provided that Charterer shall not be liable to contribute towards any salvage payable by Owner arising in any way out of services rendered under this Clause 25 .

Lien

26. Owners shall have a lien upon all cargoes and all freights, sub-freights and demurrage for any amounts due under this charter; and Charterer shall have a lien on the vessel for all monies paid in advance and not earned, and for all claims for damages arising from any breach by Owners of this charter.

Exceptions

27. (a) The vessels, their masters and Owner shall not, unless otherwise in this charter expressly provided, be liable for any loss or damage or delay or failure arising or resulting from any act, neglect or default of the masters, pilots, mariners or other servants of Owner in the navigation or management of the vessel; fire, unless caused by the actual fault or privity of Owner; collision or stranding; dangers and accidents of the sea; explosion, bursting of boilers, breakage of shafts or any latent defect in hull, equipment or machinery; provided, however, that Clauses 1, 2, 3, and 24 hereof shall be unaffected by the foregoing. Further, neither the vessels, their masters or Owner, nor Charterer shall, unless otherwise in this charter expressly provided, be liable for any loss or damage or delay or failure in performance hereunder arising or resulting from act of God, act of war, seizure under legal process, quarantine restrictions, strikes, lock-outs, riots, restraints of labor, civil commotions or arrest or restraint of princes, rulers or people.

(b) The vessel shall have liberty to sail with or without pilots, to tow or go to the assistance of vessels in distress and to deviate for the purpose of saving life or property.

(c) Clause 27(a) shall not apply to, or affect any liability of Owner or the vessels or any other relevant person in respect of:

(i) loss or damage caused to any berth, jetty, dock, dolphin, buoy, mooring line, pipe or crane or other works or equipment whatsoever at or near any place to which the vessels may proceed under this charter, whether or not such works or equipment belong to Charterer, or;

(d) In particular and without limitation, the foregoing subsections (a) and (b) of this Clause shall not apply to or in any way affect any provision in this charter relating to off-hire or to reduction of hire.

Injurious Cargoes

28. No acids, explosives or cargoes injurious to the vessel shall be shipped and without prejudice to the foregoing any damage to the vessel caused by the shipment of any such cargo, and the time taken to repair such damage, shall be for Charterer's account. No voyage shall be undertaken, nor any goods or cargoes loaded, that would expose the vessel to capture or seizure by rulers or governments.

Grade of Bunkers

29. Charterer shall supply fuel as required for the vessel. If Owner requires the vessel to be supplied with more expensive bunkers they shall be liable for the extra cost thereof.

Charterer warrants that all bunkers provided by them in accordance herewith shall be of a quality complying with ISO Standard 8217 for Marine Residual Fuels and Marine Distillate Fuels as applicable.

Disbursements

30. Should the masters require advances for ordinary disbursements at any port, Charterer or their agents shall make such advances to him, in consideration of which Owner shall pay a commission of two and a half per cent and all such advances and commission shall be deducted from hire.

Laying-up

31. Charterer shall have the option, after consultation with Owner, of requiring Owner to lay up the vessels at a safe place nominated by Charterer, in which case the hire provided for under this charter shall be adjusted to reflect any net increases in expenditure reasonably incurred or any net saving which should reasonably be made by Owner as a result of such lay up. Charterer may exercise the said option any number of times during the charter period.

Requisition

32. Should the vessel be requisitioned by any government, de facto or de jure, during the period of this charter, the vessel shall be off-hire during the period of such requisition, and any hire paid by such governments in respect of such requisition period shall be for Owner's account. Any such requisition period shall not count as part of the charter period.

Outbreak of War

33. If war or hostilities break out one of these following countries: Turkey, Libya, South Korea (except that declaration of war or hostilities solely in these countries) then both Owner and Charterer shall have the right to cancel this charter.

Additional War Expenses

34. If the vessels are ordered to trade in areas where there is war (de facto or de jure) or threat of war, Charterer shall reimburse Owner for any additional insurance premia, crew bonuses and other expenses which are reasonably incurred by Owner as a consequence of such orders, provided that Charterer are given notice of such expenses as soon as practicable and in any event before such expenses are incurred, and provided further that Owner obtain from their insurers a waiver of any subrogated rights

against Charterer in respect of any claims by Owner under their war risk insurance arising out of compliance with such orders.

Any payments by Charterer under this Clause will only be made against proven documentation. Any discount or rebate refunded to Owner, for whatever reason, in respect of additional war risk premium shall be passed on to Charterer.

War Risks

35. (a) The masters shall not be required or bound to sign Bills of Lading for any place which in their or Owner's reasonable opinion is dangerous or impossible for the vessels to enter or reach owing to any blockade, war, hostilities, warlike operations, civil war, civil commotions or revolutions.

(b) If in the reasonable opinion of the masters or Owner it becomes, for any of the reasons set out in Clause 35(a) or by the operation of international law, dangerous, impossible or prohibited for the vessels to reach or enter, or to load or discharge cargo at, any place to which the vessel has been ordered pursuant to this charter (a "*place of peril*"), then Charterer or their agents shall be immediately notified in writing or by radio messages, and Charterer shall thereupon have the right to order the cargo, or such part of it as may be affected, to be loaded or discharged, as the case may be, at any other place within the trading limits of this charter (provided such other place is not itself a place of peril). If any place of discharge is or becomes a place of peril, and no orders have been received from Charterer or their agents within 48 hours after dispatch of such messages, then Owner shall be at liberty to discharge the cargo or such part of it as may be affected at any place which they or the master may in their or his discretion select within the trading limits of this charter and such discharge shall be deemed to be due fulfillment of Owner's obligations under this charter so far as cargo so discharged is concerned.

(c) The vessels shall have liberty to comply with any directions or recommendations as to departure, arrival, routes, ports of call, stoppages, destinations, zones, waters, delivery or in any other wise whatsoever given by the government of the state under whose flag the vessels sail or any other government or local authority or by any person or body acting or purporting to act as or with the authority of any such government or local authority including any de facto government or local authority or by any person or body acting or purporting to act as or with the authority of any such government or local authority or by any committee or person having under the terms of the war risks insurance on the vessels the right to give any such directions or recommendations. If by reason of or in compliance with any such directions or recommendations anything is done or is not done, such shall not be deemed a deviation. If by reason of or in compliance with any such direction or recommendation the vessels do not proceed to any place of discharge to which they have been ordered pursuant to this charter, the vessels may proceed to any place which the masters or Owner in their discretion select and there discharge the cargo or such part of it as may be affected. Such discharge shall be deemed to be due fulfillment of Owner's obligations under this charter so far as cargo so discharged is concerned.

Charterer shall procure that all Bills of Lading issued under this charter shall contain the Chamber of Shipping War Risks Clause 1952.

Both to Blame Collision Clause

36. If the liability for any collision in which the vessels are involved while performing this charter fails to be determined in accordance with English law, the following provision shall apply:

"If the ship comes into collision with another ship as a result of the negligence of the other ship and any act, neglect or default of the master, mariner, pilot or the servants of the carrier in the navigation or in the management of the ship, the owners of the cargo carried hereunder will indemnify the carrier against all loss, or liability to the other or non-carrying ship or their owner in so far as such loss or liability represents loss of, or damage to, or any claim whatsoever of the owner of the said cargo, paid or payable by the other or non-carrying ship or their owner to the owner of the said cargo and set off, recouped or recovered by the other or non-carrying ship or their owners as part of their claim against the carrying ship or carrier."

"The foregoing provisions shall also apply where the owners, operators or those in charge of any ship or ships or objects other than, or in addition to, the colliding ships or objects are at fault in respect of a collision or contact."

Charterer shall procure that all Bills of Lading issued under this charter shall contain a provision in the foregoing terms to be applicable where the liability for any collision in which the vessel is involved fails to be determined in accordance with English law.

New Jason Clause

37. General average contributions shall be payable according to York/Antwerp Rules, 1994 as amended from time to time, and shall be adjusted in London in accordance with English law and

practice but should adjustment be made in accordance with the law and practice of Turkey, the following position shall apply:

*"In the event of accident, danger, damage or disaster before or after the commencement of the voyage, resulting from any cause whatsoever, whether due to negligence or not, for which, or for the consequence of which, the carrier is not responsible by statute, **contract** or otherwise, the cargo, shippers, consignees or owners of the cargo shall contribute with the carrier in general average to the payment of any sacrifices, losses or expenses of a general average nature that may be made or incurred and shall pay salvage and special charges incurred in respect of the cargo."*

"If a salving ship is owned or operated by the carrier, salvage shall be paid for as fully as if the said salving ship or ships belonged to strangers. Such deposit as the carrier or

his agents may deem sufficient to cover the estimated contribution of the cargo and any salvage and special charges thereon shall, if required, be made by the cargo, shippers, consignees or owners of the cargo to the carrier before delivery."

Charterer shall procure that all Bills of Lading issued under this charter shall contain a provision in the foregoing terms, to be applicable where adjustment of general average is made in accordance with the laws and practice of English law.

Clause Paramount

38. Charterer shall procure that all Bills of Lading issued pursuant to this charter shall contain the following:

"(1) Subject to sub-Clause (2) or (3) hereof, this Bill of Lading shall be governed by, and have effect subject to, the rules contained in the International Convention for the Unification of Certain Rules relating to Bills of Lading signed at Brussels on 25th August 1924 (hereafter the "*Hague Rules*") as amended by the Protocol signed at Brussels on 23rd February 1968 (hereafter the "*Hague-Visby Rules*"). Nothing contained herein shall be deemed to be either surrender by the carrier of any of his rights or immunities or any increase of any of his responsibilities or liabilities under the Hague-Visby Rules."

"(2) If there is governing legislation which applies the Hague Rules compulsorily to this Bill of Lading, to the exclusion of the Hague-Visby Rules, then this Bill of Lading shall have effect subject to the Hague Rules. Nothing therein contained shall be deemed to be either surrender by the carrier of any of his rights or immunities or an increase of any of his responsibilities or liabilities under the Hague Rules."

"(3) If there is governing legislation which applies the United Nations Convention on the Carriage of Goods by Sea 1978 (hereafter the "*Hamburg Rules*") compulsorily to this Bill of Lading, to the exclusion of the Hague-Visby Rules, then this Bill of Lading shall have effect subject to the Hamburg Rules. Nothing therein contained shall be deemed to be either surrender by the carrier of any of his rights or immunities or an increase of any of his responsibilities or liabilities under the Hamburg Rules."

"(4) If any term of this Bill of Lading is repugnant to the Hague-Visby Rules, or Hague Rules, or Hamburg Rules, as applicable, such term shall be void to that extent but no further."

"(5) Nothing in this Bill of Lading shall be construed as in any way restricting, excluding or waiving the right of any relevant party or person to limit his liability under any available legislation and/or law."

Insurance/ITOPF

39. Owner warrants that the vessel is now, and will, throughout the duration of the charter:

(a) be owned or demise chartered by a member of the International Tanker Owners Pollution Federation Limited;

(b) be properly entered in a P & I Club, being a member of the International Group of P & I Clubs;

(c) have in place insurance cover for oil pollution for the maximum on offer through the International Group of P & I Clubs but always a minimum of United States Dollars 1,000,000,000 (one thousand million);

(d) have in full force and effect Hull and Machinery insurance placed through reputable brokers on Institute Time Clauses or equivalent for the market value agreed by Owner and Charterer.

Owner will provide, within a reasonable time following a request from Charterer to do so, documented evidence of compliance with the warranties given in this Clause 39.

Export Restrictions

40. The masters shall not be required or bound to sign Bills of Lading for the carriage of cargo to any place to which export of such cargo is prohibited under the laws, rules or regulations of the country in which the cargo was produced and/or shipped.

Charterer shall procure that all Bills of Lading issued under this charter shall contain the following clause:

*"If any laws rules or regulations applied by the government of the country in which the cargo was produced and/or shipped, or any relevant agency thereof, impose a prohibition on export of the cargo to the place of discharge designated in or ordered under this Bill of Lading, carriers shall be entitled to require cargo owners forthwith to nominate an alternative discharge place for the discharge of the cargo, or such part of it as may be affected, which alternative place shall not be subject to the prohibition, and carriers shall be entitled to accept orders from cargo owners to proceed to and discharge at such alternative place. If cargo owners fail to nominate an alternative place within 72 hours after they or their agents have received from carriers notice of such prohibition, carriers shall be at liberty to discharge the cargo or such part of it as may be affected by the prohibition at any safe place on which they or the master may in their or his absolute discretion decide and which is not subject to the prohibition, and such discharge shall constitute due performance of the **contract** contained in this Bill of Lading so far as the cargo so discharged is concerned".*

The foregoing provision shall apply mutatis mutandis to this charter, the references to a Bill of Lading being deemed to be references to this charter.

Drugs and Alcohol

41. (a) Owner warrants that they have in force an active policy covering the vessels which meet or exceed the standards set out in the "*Guidelines for the Control of Drugs and Alcohol On Board Ship*" as published by the Oil Companies International Marine Forum (OCIMF) dated January 1990 (or any subsequent modification, version, or variation of these guidelines) and that this policy will remain in force throughout the charter period, and Owners will exercise due diligence to ensure the policy is complied with.

(b) Owner warrants that the current policy concerning drugs and alcohol on board is acceptable to ExxonMobil and will remain so throughout the charter period.

Oil Major Acceptability

42. If, at any time during the charter period, the vessels become unacceptable to any Oil Major, Charterer shall have the right to terminate the charter.

Pollution and Emergency Response

43. Owner is to advise Charterer of organizational details and name of Owner personnel together with their relevant telephone/facsimile/e-mail/telex numbers, including the names and contact details of Qualified Individuals for OPA 90 response, who may be contacted on a 24 hour basis in the event of oil spills or emergencies.

ISPS Code/US MTSA 2002

44. (a). (i) From the date of coming into force of the International Code for the Security of Ships and of Port Facilities and the relevant amendments to Chapter XI of SOLAS (ISPS Code) and the US Maritime Transportation Security Act 2002 (MTSA) in relation to the Vessel and thereafter during the currency of this charter, Owners shall procure that both the Vessel and "*the Company*" (as defined by the ISPS Code) and the "*owner*" (as defined by the MTSA) shall comply with the requirements of the ISPS Code relating to the Vessel and "*the Company*" and the requirements of MTSA relating to the vessel and the "*owner*". Upon request Owner shall provide documentary evidence of compliance with this Clause 45(a) (i).

(ii) Except as otherwise provided in this charter, loss, damage, expense or delay, caused by failure on the part of Owner or "*the Company*" / "*owner*" to comply with the requirements of the ISPS Code/MTSA or this Clause shall be for Owner's account.

(b) (i) Charterer shall provide Owner/Masters with their full style contact details and shall ensure that the contact details of all sub-charterers are likewise provided to

Owner/Masters. Furthermore, Charterer shall ensure that all sub-charter parties they enter into during the period of this charter contain the following provision:

"The Charterer shall provide the Owners with their full style contact details and, where sub-letting is permitted under the terms of the charter party, shall ensure that the contact details of all sub-charterers are likewise provided to the Owner".

(ii) Except as otherwise provided in this charter, loss, damage, expense or delay, caused by failure on the part of Charterer to comply with this sub-Clause 44(b) shall be for Charterer's account.

(c). Notwithstanding anything else contained in this charter costs or expenses related to security regulations or measures required by the port facility or any relevant authority in accordance with the ISPS Code/MTSA including, but not limited to, security guards, launch services, tug escorts, port security fees or taxes and inspections, shall be for Charterer's account, unless such costs or expenses result solely from Owner's negligence in which case such costs or expenses shall be for Owner's account. All measures required by Owner to comply with the security plan required by the ISPS Code/MTSA shall be for Owner's account.

(d) Notwithstanding any other provision of this charter, the vessel shall not be off-hire where there is a loss of time caused by Charterer's failure to comply with the ISPS code/MTSA (when in force).

(e) If either party makes any payment which is for the other party's account according to this Clause, the other party shall indemnify the paying party.

Confidentiality

45. All terms and conditions of this charter arrangement shall be kept private and confidential, except as required by applicable law.

Construction

46. The side headings have been included in this charter for convenience of reference and shall in no way affect the construction hereof.

SIGNED BY Zueitina Oil Company

Owner Nautilus Shipping Inc.

6 - Finance

6.1 - Brief history and current situation of the financial market.

Before starting the financial analysis of the vessels we have to evaluate the current situation of the financial market. This analysis is going to start from the year 2004 and is going to describe the events that occurred until now and force the economy in the existing crisis.

In order to understand this brief history we have to admit that economy is a circle function. No one knows when a crisis is going to occur and when it is going to stop. The only tools that can help us are economic forecasts for the future. A crisis even if it is a maritime crisis or general economic crisis has 4 stages:

- Stage #1: trough
- Stage #2: recovery
- Stage #3: peak
- Stage #4: collapse

The question now is what a financial crisis is?

1. "The term financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value."¹¹
2. Crisis in general is a situation that the economy comes after some specific events occur. The route that the economy has is not any more linear or stable. The general rules of the economy do not apply any more. We can assume that if the economy was an SPSS system the crisis is what we call a "dummy variable". The question now becomes why the crisis occurred and how it infects our sector

¹¹ C. Avery and P. Zemsky (1998), ' Multidimensional Uncertainty and Herd Behavior in Financial Markets'. "American Economic Review" 88, pp. 724-748

6.1.1 - Year 2004

At this year we have the first events that occurred and helped the economic crisis to begin. The events occurred in the sector of real estate and we have to mention that this happened only in specific areas of the United States. The area that the problem begins is in the state of Florida in the city of Miami and in the state of Michigan in the city of Detroit.

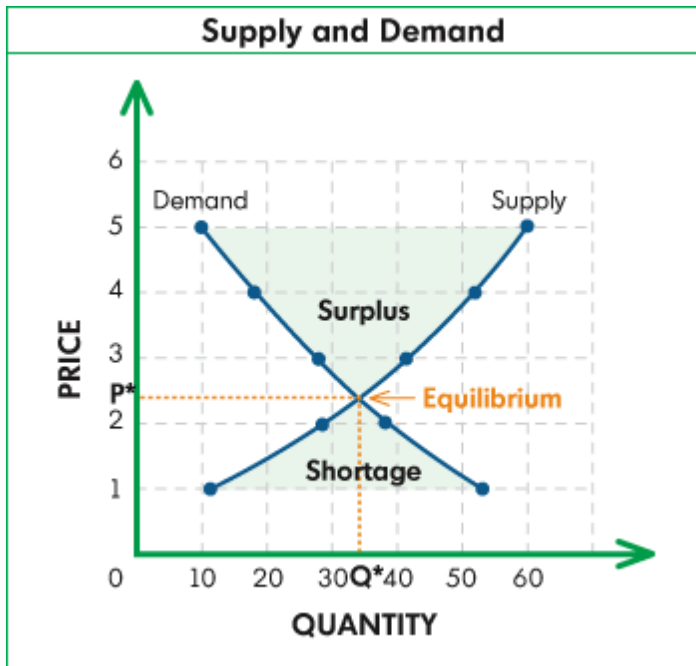
In order to buy a house in the United States people have the ability to fund the value of the house by using 80% debt and 20% equity. Until now the citizen has only one loan in one bank. The citizen has the ability to get another loan from another bank in order to fund the 20% of the value of the house that he had initial fund it as equity.

Those are the steps that help the economic crisis to occur:

Banks start providing loans extremely easy to the customers without evaluating correctly the credit of the customers.



Due to supply and demand the market value of the houses starts to increase.



The banks keep providing loans without the proper evaluation of the customers.



The customers start to see the house as a security. Try to buy the house now and sell it in a few months in order to gain money because the market value of the house was rising dramatically.



Conclusion: The market value of the house is not the real value of the house

Market value of the house > Real value of the house

6.1.2 - Banks

The banking system has the most important role in the economy of the country. The role of a bank is to secure the money of the customers not by just keeping them safe but invest them in a way that the initial money provides additional cash flows so the bank has the ability to offer interest to the clients. The way that a bank invests the money of her clients is by inventing-fixing securities and selling them in the domestic or global market. There are variable products – securities that a bank can fix in order to trade them in the domestic or the global market. Those products could be stocks, bonds, derivatives, options, etc.

Additional Information

Bonds: "A bond is a debt security, in which the authorized issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay interest (the coupon) and/or to repay the principal at a later date, termed maturity. It is a formal contract to repay borrowed money with interest at fixed intervals."¹²

Derivatives: "Derivatives are financial contracts, or financial instruments, whose values are derived from the value of something else (known as the underlying). The underlying on which a derivative is based can be an asset (e.g., commodities, equities (stocks), residential mortgages, commercial real estate, loans, bonds), an index (e.g., interest rates, exchange rates, stock market indices, consumer price index (CPI) — see inflation derivatives), or other items (e.g., weather conditions, or other derivatives). Credit derivatives are based on loans, bonds or other forms of credit.

6.1.3 - The problem becomes global

At the beginning the customers that bought houses in this period and operate them as securities now they don't have the money to pay back the banks. The banks can not take back her money from the customers but they have already fix securities and sell them to the stock market. The banks as usual have lent and been lend money to other banks as usual for the banking system to operate. As a conclusion we have now a financial chain between the customers to the banks and from the banks to other banks. The problem in this financial situation is the lack of the cash flow due to the bubble that occurred in the sector of real estate.

Until now the problem is in the domestic market of the United States. The problem becomes global because of the stock market especially the New York Stock Exchange (NYSE) and NASDAQ. This issue occurs because banks trade their products in the stock markets so each one that buys a product-security from those banks that have been in the real estate market is going to be effected. Because of the lack of cash flow the banks could not pay their obligations to other banks. Other banks do not lend money because they are afraid that they could not take them back. The first bank bankrupts. The crisis has begun!

6.1.4 - Crisis in the maritime sector:

Maritime has also been affected from the financial crisis. The question is why and how maritime could be affected from the general condition of the economy and the banking system.

Reasons:

The demand for maritime transportation and cargo shipment is a derived demand. This means that this demand derives her function from another general - initial demand. The shipments around the world and especially from China which use to import and export huge amounts of cargo due to the Olympic Games and the economic growth that the country had the last five years has now deduct the shipments of cargo because of the crisis.

Another important issue is that most maritime companies operate in a unique financial way than land businesses. In most maritime companies their balance sheet shows equity 10%-20% and debt 90%-80%. That is happening because most of the funds in order to buy a vessel are funds that come from the debt part. The debt part is the loans that the companies take from the banks. Combining the information from the general crisis to the maritime industry we come up with the conclusion that maritime companies can not buy vessels so they can not operate if they to not take loans from the banks. Because of the economic crisis banks do not lent money so maritime companies do not have the funds in order to buy vessels. Another important factor is that the maritime

industry the last 5 years was extremely profitably. That has as a conclusion that a lot of general investors came to invest money to this industry. (Except from the usual ship-owners). When the economic crisis begun to affect the maritime industry the general investors are the first that they are going to take their money from the industry of maritime and invest them in another sector of the economy. This situation is also a significant problem that the maritime industry is facing right now.

6.1.5 - Shipping cycle

In order to understand the crisis to the maritime industry we have to talk about ship finance and shipping market dynamics. Before analysing a shipping cycle we have to divide shipping in 4 general sector.

Sector # 1: **New Buildings Market**

Sector # 2: **Sale and Purchase (S&P) Market**

Sector # 3: **Demolition Market (Scrap)**

Sector # 4: **Freight rates Market**

This is how a shipping cycle occurs:

1. At the beginning there is an increase in the freight rate due to supply and demand- **Freight rates Market**



2. The ship-owners due to the increase of the freights buy at the beginning second hand vessels -**Sale and Purchase (S&P) Market**



3. After the earnings and the net profit from the second hand vessels the ship-owners have the ability to build new vessels add them to their existing fleet and operate them in order to provide cash flows- **New Buildings Market**



4. Due to supply and demand the freight rates start to decrease because the number of vessels in the market has increased- **Freight rates Market**



5. The ship-owners start to sell vessels. The vessels that are old become scrap. - **Demolition Market (Scrap)**



6. Due to the decrease of the number of the vessels in the market the supply decreases and the demand for vessels increases



7. This has as a conclusion an increase in the freights rates- **Freight rates Market**

At this point the shipping circle has stop and starts again from the beginning

6.2 - Profitability analysis of the new buildings

6.2.1 - Tools and ways that we are going to use during the profitability analysis

Scope of this part is a profitability analysis of the three new buildings. In each business plan one of the most important parts is the financial part. At this point we are going to examine the additional cash flows that the new assets (vessels) of the company are going to provide in a specific time period (4 years). The way that we are going to examine this issue is going to be by dividing in three major categories.

Category #1: Net Initial investment-NII

1. Purchase price of the vessel (-)
2. Change in the working capital of the company due to the purchase of the new asset (-)
3. Transportation and repair costs of the new asset (-)

The sum of this total is the net initial investment and it is a sum that is going to be negative due to the variables that are included

Category #2: Net Incremental operating Cash Flows-OCF

In this category we are going to evaluate and put all the inflows and out flows that are going to occur during the time charter of the vessel

Category #3: Net Terminal Cash Flows-TCF

1. Scrap value or earning cash flows from the sale of the vessel (+)
2. Change in the working capital of the company (+)
3. Disposal costs (-)
4. Tax adjustments (-)

After evaluating each one of those categories we are going to use the financial tools of

1. Net Present value-NPV: $NII + (OCF1 * PVIF_{r,1}) + (OCF2 * PVIF_{r,2}) + (OCF3 * PVIF_{r,3}) + (OCF_n * PVIF_{r,n})$

2. Profitability index-P.I.: Present Value of Cash Flows / NII

3. Initial rate of return- IRR: $NII = PV$ of Owner's Cash Flows

6.2.2 - Vessel #1: KEMAL 3

Net Initial investment-NII

1. Purchase price of the vessel	(-)90,000,000\$
2. Change in the working capital of the company due to the purchase of the new asset	(-)100,000\$
3. Transportation and repair costs of the new asset	(-) 400,000\$
TOTAL	90,500,000\$

Net incremental operating cash flows-OCF

Year 1:

Freight earning from the vessel yearly:

+19,450,000\$ (daily freight 54,027.7778\$)

Operation cost of the vessel:

-10,000,000\$ (daily costs 27,777.78\$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total 9,450,000\$

Year 2 :

Freight earning from the vessel yearly:

+19,450,000\$ (daily freight 54,027.7778\$)

Operation cost of the vessel:

-11,125,000\$ (daily costs 30,902.78\$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total 8,325,000\$

Year 3:

Freight earning from the vessel yearly:

+19,450,000\$ (daily freight 54,027.7778\$)

Operation cost of the vessel:

-11,969,000\$ (daily costs 33,247.22\$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total 7,481,000\$

Year 4:

Freight earning from the vessel yearly:

+19,450,000\$ (daily freight 54,027.7778\$)

Operation cost of the vessel:

-12602,000\$ (daily costs 35,005.56\$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total 6,848,000\$

Net terminal cash flows-TCF

- 1. Scrap value or earning cash flows from the sale of the vessel or current market price of the vessel (+) 60,000,000\$
- 2. Change in the working capital of the company (+) 0\$
- 3. Disposal costs (-) 0\$

The change in the working capital and disposal costs is 0\$ because the company is going to keep owning the vessel after those four years

In the OCF all cash flows must be in the same time .we need now P.V.OCF
 The cash flows from OCF are not equal so it is not an annuity
 The terminal value cash flow must be also in the same time
 The terminal value and the OCF must be discount

The type is

$$NPV = -NII + \{OCF_1(PVIF_{rr}, 1) + OCF_2(PVIF_{rr}, 2) + \dots + TCF(PVIF_{rr}, n)\}$$

$$NPV = -90,500 + 9450 * \{(1+0.09)^{-1}\} + 8325 * \{(1+0.09)^{-2}\} + 7481 * \{(1+0.09)^{-3}\} + 6848 * \{(1+0.09)^{-4}\} + 60,000 * \{(1+0.09)^{-4}\} = -90,500 + 103,502 = 13,002 \text{ (000\$)}$$

Profitability index:

$$\text{Type: } PI = PV \text{ CASH FLOWS} / NII = 103,502,000 / 90,500,000 = 1.14$$

This means that for every one \$ that is invested to this vessel we take back 1,14\$

Internal rate of return:

Is the discount rates that equates the present value of OCF to the investment

Type: $NII = PV \text{ OCF}$

Since the cash flows of the vessel are not equal-not annuity

The type we are going to use is:

$$NII = \{OCF_1(PVIF_r, 1) + OCF_2(PVIF_r, 2) + \dots + TCF_n(PVIF_r, n)\} \quad r = ?$$

By using a financial calculator the discount rate that can equate the present value of OCF with Net Initial Investment Is approximately 22%

VESSEL	N.P.V.	P.I.	I.R.R.
KEMAL 3	13002	1,14	22%

During the profitability of the first vessel we found that the NPV is positive and mean that is acceptable. If the NPV was negative we will then had to reject the vessels purchase or the operation under this specific time charter.

The profitability index indicates that the operation of the vessel provides cash flow to the company.(because the index is above 1). The IRR is also accepted because it is above the RRR –required rate of return which is 9%

6.2.3 - Vessel #2: MUSTAFA

Net Initial investment-NII

1. Purchase price of the vessel	(-)90,000,000\$
2. Change in the working capital of the company due to the purchase of the new asset	(-)100,000\$
3. Transportation and repair costs of the new asset	(-)500,000\$
TOTAL	90,600,000\$

Net incremental operating cash flows-OCF

Year 1:

Freight earning from the vessel yearly:

+18,534,000\$ (51,483.33 daily freight \$)

Operation cost of the vessel:

-11,969,000\$ (27,777.78daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total +6,838,000\$

Year 2:

Freight earning from the vessel yearly:

+18,534,000\$ (51,483.33 daily freight \$)

Operation cost of the vessel:

-12,696,000\$ (35,266.67 daily costs \$)

- Crew
- Management costs
- Maintenance

- Loan
- Insurance

Total +5,838,000\$

Year 3:

Freight earning from the vessel yearly:

+18,534,000\$ (51,483.33 daily freight \$)

Operation cost of the vessel:

-13,446,000\$ (37,350.00 daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total +5,088,000\$

Year 4:

Freight earning from the vessel yearly:

+18,534,000\$ (51,483.33 daily freight \$)

Operation cost of the vessel:

-14,008,000\$ (38,911.11 daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total +4,526,000\$

Net terminal cash flows-TCF

- 1. Scrap value or earning cash flows from the sale of the vessel or current market price of the vessel (+) 60,000,000\$
- 2. Change in the working capital of the company (+) 0\$
- 3. Disposal costs (-) 0\$

The change in the working capital and disposal costs is 0\$ because the company is going to keep owning the vessel after those four years

In the OCF all cash flows must be in the same time .we need now P.V.OCF
 The cash flows from OCF are not equal so it is not an annuity
 The terminal value cash flow must be also in the same time
 The terminal value and the OCF must be discount

The type is

$$NPV = -NII + \{OCF_1(PVIF_{r,r},1) + OCF_2(PVIF_{r,r},2) + \dots + TCF(PVIF_{r,r},n)\}$$

$$NPV = -90,600 + 6838 * \{(1+0.09)^{-1}\} + 5838 * \{(1+0.09)^{-2}\} + 5088 * \{(1+0.09)^{-3}\} + 4526 * \{(1+0.09)^{-4}\} + 60,000 * \{(1+0.09)^{-4}\} = -90,600 + 101,600 = 11,000 (000\$)$$

Profitability index:

$$\text{Type: } PI = PV \text{ CASH FLOWS} / NII = 101,600,000 / 90,600,000 = 1,12\$$$

This means that for every one \$ that is invested to this vessel we take back 1,12\$

Internal rate of return:

Is the discount rates that equates the present value of OCF to the investment

Type: $NII = PV \text{ OCF}$

Since the cash flows of the vessel are not equal-not annuity

The type we are going to use is:

$$NII = \{OCF_1(PVIF_r,1) + OCF_2(PVIF_r,2) + \dots + TCF_n(PVIF_r,n)\} \quad r = ?$$

By using a financial calculator the discount rate that can equate the present value of OCF with Net Initial Investment

Is approximately 19%

N.P.V.	P.I.	I.R.R.
11000	1,12	19%

During the profitability of the first vessel we found that the NPV is positive and mean that is acceptable. If the NPV was negative we will then had to reject the vessels purchase or the operation under this specific time charter.

The profitability index indicates that the operation of the vessel provides cash flow to the company. (because the index is above 1). The IRR is also accepted because it is above the RRR –required rate of return, which is 9%

6.2.4 - Vessel #3: ARMAN

Net Initial investment-NII

1. Purchase price of the vessel	(-) 90,000,000\$
2. Change in the working capital of the company due to the purchase of the new asset	(-) 50,000\$
3. Transportation and repair costs of the new asset	(-) 600,000\$
TOTAL	90,650,000\$

Net incremental operating cash flows-OCF

Year 1:

Freight earning from the vessel yearly:

+18,241,000\$ (50,669.44 daily freight \$)

Operation cost of the vessel:

-11,969,000\$ (27,777.78daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total +6,272,000\$

Year 2:

Freight earning from the vessel yearly:

+18,241,000\$ (50,669.44 daily freight \$)

Operation cost of the vessel:

-12,844,000\$ (35,677.78daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan

➤ Insurance

Total +5,397,000\$

Year 3:

Freight earning from the vessel yearly:

+18,241,000\$ (50,669.44 daily freight \$)

Operation cost of the vessel:

-13,500,000\$ (37,500.00daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total +4,741,000\$

Year 4:

Freight earning from the vessel yearly:

+18,241,000\$ (50,669.44 daily freight \$)

Operation cost of the vessel:

-13,992,000\$ (38,866.67 daily costs \$)

- Crew
- Management costs
- Maintenance
- Loan
- Insurance

Total +4,249,000\$

Net terminal cash flows-TCF

1. Scrap value or earning cash flows from the sale of the vessel or current market price of the vessel (+) 60,000,000\$
2. Change in the working capital of the company (+) 0\$
3. Disposal costs (-) 0\$

The change in the working capital and disposal costs is 0\$ because the company is going to keep owning the vessel after those four years

In the OCF all cash flows must be in the same time .we need now P.V.OCF
 The cash flows from OCF are not equal so it is not an annuity
 The terminal value cash flow must be also in the same time
 The terminal value and the OCF must be discount

The type is

$$NPV = -NII + \{OCF_1(PVIF_{r,r},1) + OCF_2(PVIF_{r,r},2) + \dots + TCF(PVIF_{r,r},n)\}$$

$$NPV = -90,650 + 6272 * \{(1+0.09)^{-1}\} + 5397 * \{(1+0.09)^{-2}\} + 4741 * \{(1+0.09)^{-3}\} + 4249 * \{(1+0.09)^{-4}\} + 60,000 * \{(1+0.09)^{-4}\} = -90,650 + 98,577 = 7927 \text{ (000\$)}$$

Profitability index:

Type: $PI = PV \text{ CASH FLOWS} / NII$

$$PI = 98,577,000 / 90,650,000 = 1,09$$

This means that for every one \$ invested in this vessel we take back 1,09\$

Internal rate of return:

Is the discount rates that equates the present value of OCF to the investment

Type: $NII = PV \text{ OCF}$

Since the cash flows of the vessel are not equal-not annuity

The type we are going to use is:

$$NII = \{OCF_1(PVIF_r,1) + OCF_2(PVIF_r,2) + \dots + TCF_n(PVIF_r,n)\} \quad r = ?$$

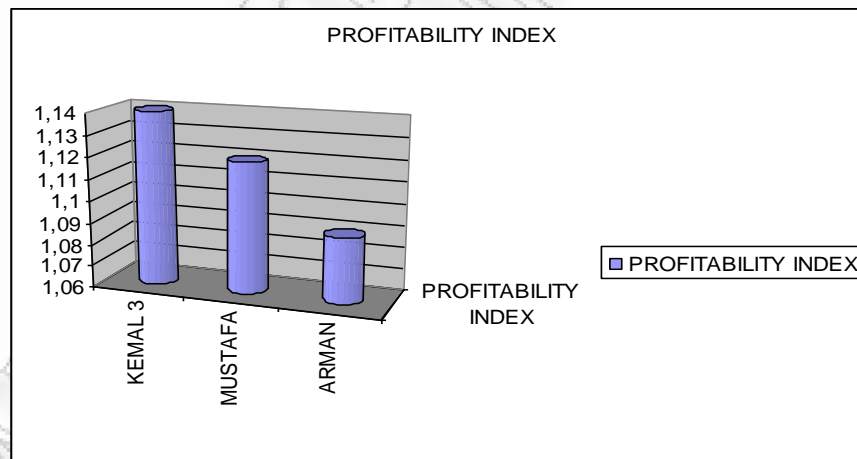
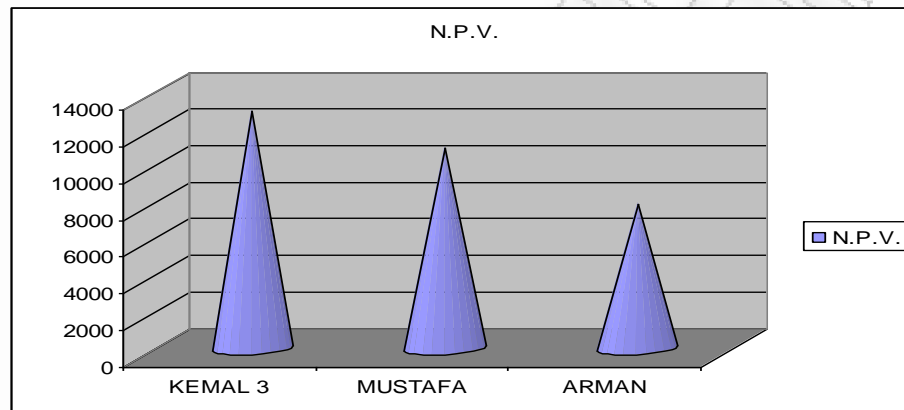
By using a financial calculator the discount rate that can equate the present value of OCF with Net Initial Investment.

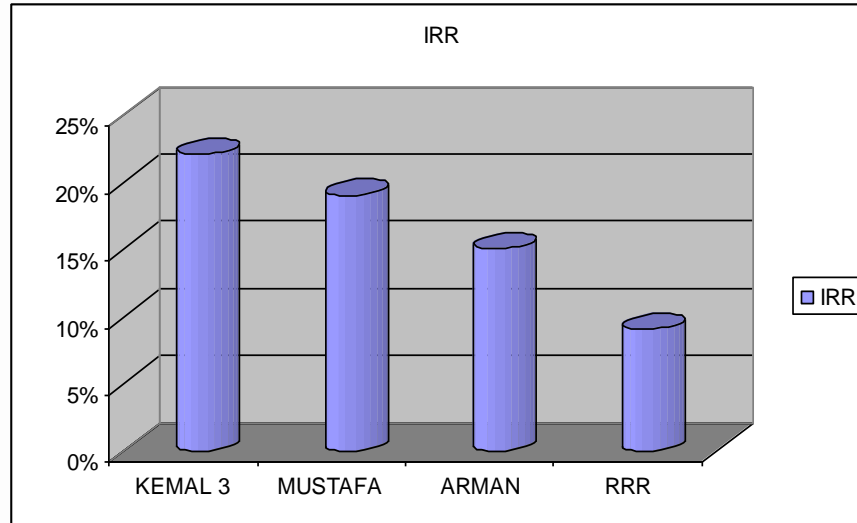
N.P.V.	P.I.	I.R.R.
7927	1,09	15%

During the profitability of the first vessel we found that the NPV is positive and mean that is acceptable. If the NPV was negative we will then had to reject the vessels purchase or the operation under this specific time charter.

The profitability index indicates that the operation of the vessel provides cash flow to the company.(because the index is above 1). The IRR is also accepted because it is above the RRR –required rate of return, which is 9%

Charts





The RRR is the required rate of return that the company wants to take back from investing her money in those assets. The RRR is the same for all three vessels (9%)

Structure of the loan and payments¹³

NAME	NUMBER
PRICE OF THE VESSEL	90,000,000\$
Equity 45%	40,500,000\$
<i>Debt 55%</i>	49,500,000\$
<i>Years to pay back the debt</i>	10 years
Amount to be paid yearly for the debt	4,950,000\$
Amount to be paid monthly for the debt	412,500\$
Amount to be paid daily for the debt	13,750\$

¹³ Month is calculated with 30 days
One year is calculated with 360 days

7 – Marine insurance

7.1 - History of ocean marine insurance

Shipping is one of the oldest activities of the humanity. Through the centuries, shipping companies felt the need to insure their vessel or their cargo in case of loss. The first signs of marine insurance appeared to 3000 BC when Chinese merchants spread their goods to different vessels in order to diminish their possibility of losing all their products. Around 916 BC, some merchants traveled with their cargo to ensure that it will reach in a good condition at the destination. If something happened to his cargo then he would be compensated from the other merchants. This is the general average, which it will be mentioned later. These were some early types of ocean marine insurances.¹⁴

Marine insurance is considered to be the first type of insurance. The insurances mentioned before are some unofficial types of insurance. The first policy was written in 1343. At the end of the fifteenth century Barcelona in Spain was the first city, which issued ordinances or codes having usages and customs relating to marine insurance. After Spain, other countries like France, Holland and England made laws for marine insurance. The two biggest organizations for

¹⁴ <http://www.clearleadinc.com/site/insurance.html> - "Clearlead e-articles"

marine insurance are in Great Britain and in USA and they have some differences in the ways they act.

The first marine insurance statute in England was commonly transacted in London by 1601. From that time, there were many individuals, merchants and not corporations who were offering insurance to the vessels. They used to sign at the end of the policy and that is why they were known as underwriters. All these merchants and mariners were meeting in coffeehouses and discussing. In 1696, Edward Lloyd, a coffeehouse owner, decided to publish Lloyd's news, known in our days as Lloyd's list. This newspaper contained interesting news for merchants, mariners and marine underwriters. After that, a lot of people related to maritime industry were meeting to this coffeehouse and they were arranging business. In 1779, Lloyd's adopted a uniform printed marine insurance policy that was approved by the parliament and led to the official British marine insurance form. Nowadays, Lloyd's are the biggest marine insurance underwriters in the world.

An interesting statistics is that 90% of FTSE companies and 93% of Dow Jones are insured at Lloyd's. These percentages show the worldwide power that this insurance company has.¹⁵

¹⁵ <http://www.lloyds.com/> - The lloyds

During Colonial times, Americans used to insure their ships to English underwriters. In 1792, the Insurance Company of North America was the first organization in USA specializing in marine insurance. After the war of 1812, shipping industry increased and also the American underwriters had many ships and cargo to insure. By the 1950s, American shipping industry started to decline affecting negatively the insurance companies. The increased taxes and the diminishing exports of farm products were some reasons. The end of the depression of 1893 was a new beginning for American ship building industry. America became a major power at this industry and insurance companies developed again.

At the World War I the 2/3 of American marine insurance were controlled by foreign countries. The premium that the insured pays was too high, preventing vessels from being insured. Federal government created the Bureau of War Risk Insurance and after the war there were three syndicates. The American Hull Insurance Syndicate was founded in 1920 and then became one of the biggest hull insurance organizations.

After the World War II until now the ocean marine premiums in the USA are less than they used to be. The US marine insurance premium income is only 17.5% of world wide marine premium, which is a small percentage for a huge country in shipping industry as USA is.

7.2 - Main types of marine insurance

There are three main types of ocean marine insurance. These are:

- Cargo insurance
- Hull insurance
- P&I

There are also other marine insurances.¹⁶

7.2.1 - Cargo Marine Insurance

Cargo insurance is the insurance that covers loss of or damage to property shipped primarily by water or, if in foreign trade, by air. Responsible for the cargo insurance is our customers, the governments of Libya and South Korea. These governments agree on the shipping terms and decide who is responsible for the cargo. We, as ship owners, we also have some responsibility on the cargo and this is covered by our P&I.

7.2.2 - Hull Insurance

The hull insurance is an issue of great importance for a shipping company. There was a deep analysis in order to decide the hull insurance companies. We decided to insure our hull in many insurance companies. This is a technique that many shipping companies do. It is a way to allocate the danger in different insurance companies in different continents. There is also the advantage that if

¹⁶ Flitner, Ocean Marine Insurance, AICPCU, 3rd edition, 2008 p. 1.5-1.11

the insurance in one place becomes expensive then you have been insured in another place, which diminishes the total cost.

Our hull is insured as follows:

- 25% in USA and more specifically is divided into the US American Hull Insurance and Navigators Insurance Company
- 25% in UK and this percentage is divided into Royal and son Alliance and Chancer
- 25% in Norway to the Norwegian Hull Club and Gard
- 25% in France to the Groupama and Far East

An example is that if the insurance becomes more expensive in USA it only affects the 25% of the total value of the vessel. This is a way to keep the cost low.

For our contracts with the insurance companies we choose the American Institute Hull Clauses. The choice is not random. American Institute Hull Clauses offers a broad coverage. In case of collision there is 4/4 coverage comparing it with England where is 3/4 of the value, the adjustments of claims are well-settled and finally the language of the policy is tested and understood by everyone that has to do with the domain of insurance.¹⁷

¹⁷ Interview with Professor Lars Gustafson

American Institute Hull Clause

(June 2, 1977)

To be attached to and form a part of Policy No. _____ of the _____

The terms and conditions of the following clauses are to be regarded as substituted for those of the policy form to which they are attached, the latter being hereby waived, except provisions required by law to be inserted in the Policy. All captions are inserted only for purposes of reference and shall not be used to interpret the clauses to which they apply.

ASSURED

This Policy insures Nautilus inc. 1
 hereinafter referred to as the Assured. 2
 3

If claim is made under this Policy by anyone other than the Owner of the Vessel, such person shall not be entitled to recover to a greater extent than would the Owner, had claim been made by the Owner as an Assured named in this Policy. 4
 5

Underwriters waive any right of subrogation against affiliated, subsidiary or interrelated companies of the Assured, provided that such waiver shall not apply in the event of a collision between the Vessel and any vessel owned, demise chartered or otherwise controlled by any of the aforesaid companies, or with respect to any loss, damage or expense against which such companies are insured. 6
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 8

LOSS PAYEE

Loss, if any, payable to Nautilus inc. / HSH- Nordbank and as interest may 9
appear 10
 or order. 11

Provided, however, Underwriters shall pay claims to others as set forth in the Collision Liability clause and may make direct payment to persons providing security for the release of the Vessel in Salvage cases. 12
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VESSEL

The Subject Matter of this insurance is the Vessel called the Kemal 3 14
 or by whatsoever name or names the said Vessel is or shall be called, which for purposes of this insurance shall consist of and be limited to her hull, 15
 launches, lifeboats, rafts, furniture, bunkers, stores, supplies, tackle, fittings, equipment, apparatus, machinery, boilers, refrigerating machinery, insula- 16
 tion, motor generators and other electrical machinery. 17

In the event any equipment or apparatus not owned by the Assured is installed for use on board the Vessel and the Assured has assumed respon- 18
 sibility therefor, it shall also be considered part of the Subject Matter and the aggregate value thereof shall be included in the Agreed Value. 19

Notwithstanding the foregoing, cargo containers, barges and lighters shall not be considered a part of the Subject Matter of this insurance. 20

DURATION OF 15th October 2011 12 p.m. time 21
 From the day of
 to the 15th day of October 2011 12 n.m. time. 22

Should the Vessel at the expiration of this Policy be at sea, or in distress, or at a port of refuge or of call, she shall, provided previous notice be 23
 given to the Underwriters, be held covered at a pro rata monthly premium to her port of destination. 24

In the event of payment by the Underwriters for Total Loss of the Vessel this Policy shall thereupon automatically terminate. 25

AGREED VALUE

The Vessel, for so much as concerns the Assured, by agreement between the Assured and the Underwriters in this Policy, is and shall be valued at 26
 Dollars. 27
103,500.000

AMOUNT INSURED HEREUNDER

..... Dollars. 28
103,500.000

DEDUCTIBLE

Notwithstanding anything in this Policy to the contrary, there shall be deducted from the aggregate of all claim under the Sue 29
 and Labor clause and claims under the Collision Liability clause) arising out of each separate accident, the sum of \$ \$150.00 , unless the 30
 accident results in a Total Loss of the Vessel in which case this clause shall not apply. A recovery from other interests, however, shall not operate to 31
 exclude claims under this Policy provided the aggregate of such claims arising out of one separate accident if unreduced by such recovery exceeds that 32
 sum. For the purpose of this clause each accident shall be treated separately, but it is agreed that (a) a sequence of damages arising from the same acci- 33
 dent shall be treated as due to that accident and (b) all heavy weather damage, or damage caused by contact with floating ice, which occurs during a 34
 single sea passage between two successive ports shall be treated as though due to one accident. 35

PREMIUM

The Underwriters to be paid in consideration of this insurance 225,000 36
 Dollars being at the annual rate of 0.25 per cent., which premium shall be due on attachment. If the Vessel 37
 is insured under this Policy for a period of less than one year at pro rata or the annual rate, full annual premium shall be considered earned and immedi- 38
 ately due and payable in the event of Total Loss of the Vessel. 39

RETURNS OF PREMIUM

Premium returnable as follows: 40
 Pro rata daily net in the event of termination under the Change of Ownership clause; 41
 Pro rata monthly net for each uncommenced month if it be mutually agreed to cancel this Policy; 42
 For each period of 30 consecutive days the Vessel may be laid up in port for account of the Assured, 43
 cents per cent. net not under repair, or 44
 cents per cent. net under repair; 45
 provided always that: 46

(a) a Total Loss of the Vessel has not occurred during the currency of this Policy;	47
(b) in no case shall a return for lay-up be allowed when the Vessel is lying in exposed or unprotected waters or in any location not approved by the Underwriters;	48
(c) in the event of any amendment of the annual rate, the above rates of return shall be adjusted accordingly;	49
(d) in no case shall a return be allowed when the Vessel is used as a storage ship or for lightering purposes.	50
If the Vessel is laid up for a period of 30 consecutive days, a part only of which attaches under this Policy, the Underwriters shall pay such proportion of the return due in respect of a full period of 30 days as the number of days attaching hereto bears to 30. Should the lay-up period exceed 30 consecutive days, the Assured shall have the option to elect the period of 30 consecutive days for which a return is recoverable.	51
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General and Particular Average shall be payable without deduction, new for old.	111
The expense of sighting the bottom after stranding shall be paid, if reasonably incurred especially for that purpose, even if no damage be found.	112
No claim shall in any case be allowed in respect of scraping or painting the Vessel's bottom.	113
In the event of loss or damage to equipment or apparatus not owned by the Assured but installed for use on board the Vessel and for which the Assured has assumed responsibility, claim shall not exceed (1) the amount the Underwriters would pay if the Assured were owner of such equipment or apparatus, or (2) the contractual responsibility assumed by the Assured to the owners or lessors thereof, whichever shall be less.	114 115 116
No claim for unrepaired damages shall be allowed, except to the extent that the aggregate damage caused by perils insured against during the period of the Policy and left unrepaired at the expiration of the Policy shall be demonstrated by the Assured to have diminished the actual market value of the Vessel on that date if undamaged by such perils.	117 118 119
GENERAL AVERAGE AND SALVAGE	
General Average and Salvage shall be payable as provided in the contract of affreightment, or failing such provision or there be no contract of affreightment, payable at the Assured's election either in accordance with York-Antwerp Rules 1950 or 1974 or with the Laws and Usages of the Port of New York. Provided always that when an adjustment according to the laws and usages of the port of destination is properly demanded by the owners of the cargo, General Average shall be paid accordingly.	120 121 122 123
In the event of salvage, towage or other assistance being rendered to the Vessel by any vessel belonging in part or in whole to the same Owners or Charterers, the value of such services (without regard to the common ownership or control of the vessels) shall be ascertained by arbitration in the manner provided for under the Collision Liability clause in this Policy, and the amount so awarded so far as applicable to the interest hereby insured shall constitute a charge under this Policy.	124 125 126 127
When the contributory value of the Vessel is greater than the Agreed Value herein, the liability of the Underwriters for General Average contribution (except in respect to amounts made good to the Vessel), or Salvage, shall not exceed that proportion of the total contribution due from the Vessel which the amount insured hereunder bears to the contributory value, and if, because of damage for which the Underwriters are liable as Particular Average, the value of the Vessel has been reduced for the purpose of contribution, the amount of such Particular Average damage recoverable under this Policy shall first be deducted from the amount insured hereunder, and the Underwriters shall then be liable only for the proportion which such net amount bears to the contributory value.	128 129 130 131 132 133
TOTAL LOSS	
In ascertaining whether the Vessel is a constructive Total Loss the Agreed Value shall be taken as the repaired value and nothing in respect of the damaged or break-up value of the Vessel or wreck shall be taken into account.	134 135
There shall be no recovery for a constructive Total Loss hereunder unless the expense of recovering and repairing the Vessel would exceed the Agreed Value. In making this determination, only expenses incurred or to be incurred by reason of a single accident or a sequence of damages arising from the same accident shall be taken into account, but expenses incurred prior to tender of abandonment shall not be considered if such are to be claimed separately under the Sue and Labor clause.	136 137 138 139
In the event of Total Loss (actual or constructive), no claim to be made by the Underwriters for freight, whether notice of abandonment has been given or not.	140 141
In no case shall the Underwriters be liable for unrepaired damage in addition to a subsequent Total Loss sustained during the period covered by this Policy.	142 143
SUE AND LABOR	
And in case of any Loss or Misfortune, it shall be lawful and necessary for the Assured, their Factors, Servants and Assigns, to sue, labor and travel for, in, and about the defense, safeguard and recovery of the Vessel, or any part thereof, without prejudice to this insurance, to the charges whereof the Underwriters will contribute their proportion as provided below. And it is expressly declared and agreed that no acts of the Underwriters or Assured in recovering, saving or preserving the Vessel shall be considered as a waiver or acceptance of abandonment.	144 145 146 147
In the event of expenditure under the Sue and Labor clause, the Underwriters shall pay the proportion of such expenses that the amount insured hereunder bears to the Agreed Value, or that the amount insured hereunder (less loss and/or damage payable under this Policy) bears to the actual value of the salvaged property, whichever proportion shall be less; provided always that their liability for such expenses shall not exceed their proportionate part of the Agreed Value.	148 149 150 151
If claim for Total Loss is admitted under this Policy and sue and labor expenses have been reasonably incurred in excess of any proceeds realized or value recovered, the amount payable under this Policy will be the proportion of such excess that the amount insured hereunder (without deduction for loss or damage) bears to the Agreed Value or to the sound value of the Vessel at the time of the accident, whichever value was greater; provided always that Underwriters' liability for such expenses shall not exceed their proportionate part of the Agreed Value. The foregoing shall also apply to expenses reasonably incurred in salvaging or attempting to save the Vessel and other property to the extent that such expenses shall be regarded as having been incurred in respect of the Vessel.	152 153 154 155 156 157
COLLISION LIABILITY	
And it is further agreed that:	158
(a) if the Vessel shall come into collision with any other ship or vessel, and the Assured or the Surety in consequence of the Vessel being at fault shall become liable to pay and shall pay by way of damages to any other person or persons any sum or sums in respect of such collision, the Underwriters will pay the Assured or the Surety, whichever shall have paid, such proportion of such sum or sums so paid as their respective subscriptions hereto bear to the Agreed Value, provided always that their liability in respect to any one such collision shall not exceed their proportionate part of the Agreed Value;	159 160 161 162 163
(b) in cases where, with the consent in writing of a majority (in amount) of Hull Underwriters, the liability of the Vessel has been contested, or proceedings have been taken to limit liability, the Underwriters will also pay a like proportion of the costs which the Assured shall thereby incur or be compelled to pay.	164 165 166
When both vessels are to blame, then, unless the liability of the owners or charterers of one or both such vessels becomes limited by law, claims under the Collision Liability clause shall be settled on the principle of Cross-Liabilities as if the owners or charterers of each vessel had been compelled to pay to the owners or charterers of the other of such vessels such one-half or other proportion of the latter's damages as may have been properly allowed in ascertaining the balance or sum payable by or to the Assured in consequence of such collision.	167 168 169 170
The principles involved in this clause shall apply to the case where both vessels are the property, in part or in whole, of the same owners or charterers, all questions of responsibility and amount of liability as between the two vessels being left to the decision of a single Arbitrator, if the parties can agree upon a single Arbitrator, or failing such agreement, to the decision of Arbitrators, one to be appointed by the Assured and one to be appointed by the majority (in amount) of Hull Underwriters interested; the two Arbitrators chosen to choose a third Arbitrator before entering upon the reference, and the decision of such single Arbitrator, or of any two of such three Arbitrators, appointed as above, to be final and binding.	171 172 173 174 175
Provided always that this clause shall in no case extend to any sum which the Assured or the Surety may become liable to pay or shall pay in consequence of, or with respect to:	176 177
(a) removal or disposal of obstructions, wrecks or their cargoes under statutory powers or otherwise pursuant to law;	178
(b) injury to real or personal property of every description;	179
(c) the discharge, spillage, emission or leakage of oil, petroleum products, chemicals or other substances of any kind or description whatsoever;	180
(d) cargo or other property on or the engagements of the Vessel;	181
(e) loss of life, personal injury or illness.	182
Provided further that exclusions (b) and (c) above shall not apply to injury to other vessels or property thereon except to the extent that such injury arises out of any action taken to avoid, minimize or remove any discharge, spillage, emission or leakage described in (c) above.	183 184

PILOTAGE AND TOWAGE

This insurance shall not be prejudiced by reason of any contract limiting in whole or in part the liability of pilots, tugs, towboats, or their owners when the Assured or the agent of the Assured accepts such contract in accordance with established local practice. 185
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 Where in accordance with such practice, pilotage or towage services are provided under contracts requiring the Assured or the agent of the Assured: 187
 (a) to assume liability for damage resulting from collision of the Vessel insured with any other ship or vessel, including the towing vessel, or 188
 (b) to indemnify those providing the pilotage or towage services against loss or liability for any such damages, 189
 it is agreed that amounts paid by the Assured or Surety pursuant to such assumed obligations shall be deemed payments "by way of damages to any other person or persons" and to have been paid "in consequence of the Vessel being at fault" within the meaning of the Collision Liability clause in this Policy to the extent that such payments would have been covered if the Vessel had been legally responsible in the absence of any agreement. Provided always 190
 that in no event shall the aggregate amount of liability of the Underwriters under the Collision Liability clause, including this clause, be greater than 191
 the amount of any statutory limitation of liability to which owners are entitled or would be entitled if liability under any contractual obligation referred to in 192
 this clause were included among the liabilities subject to such statutory limitations. 193
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CHANGE OF OWNERSHIP

In the event of any change, voluntary or otherwise, in the ownership or flag of the Vessel, or if the Vessel be placed under new management, or be chartered on a bareboat basis or requisitioned on that basis, or if the Classification Society of the Vessel or her class therein be changed, cancelled or withdrawn, then, unless the Underwriters agree thereto in writing, this Policy shall automatically terminate at the time of such change of ownership, flag, management, charter, requisition or classification; provided, however, that: 196
 197
 (a) if the Vessel has cargo on board and has already sailed from her loading port, or is at sea in ballast, such automatic termination shall, if required, be deferred until arrival at final port of discharge if with cargo, or at port of destination if in ballast; 200
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 (b) in the event of an involuntary temporary transfer by requisition or otherwise, without the prior execution of a written agreement by the Assured, such automatic termination shall occur fifteen days after such transfer. 202
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 This insurance shall not inure to the benefit of any transferee or charterer of the Vessel and, if a loss payable hereunder should occur between the time of change or transfer and any deferred automatic termination, the Underwriters shall be subrogated to all of the rights of the Assured against the transferee or charterer in respect of all or part of such loss as is recoverable from the transferee or charterer, and in the proportion which the amount insured hereunder bears to the Agreed Value. 204
 205
 The term "new management" as used above refers only to the transfer of the management of the Vessel from one firm or corporation to another, and it shall not apply to any internal changes within the offices of the Assured. 208
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ADDITIONAL INSURANCES

It is a condition of this Policy that no additional insurance against the risk of Total Loss of the Vessel shall be effected to operate during the currency of this Policy by or for account of the Assured, Owners, Managers, Operators or Mortgagees except on the interests and up to the amounts enumerated in the following Sections (a) to (g), inclusive, and no such insurance shall be subject to P.P.I., F.I.A. or other like term on any interests whatever excepting those enumerated in Section (a); provided always and notwithstanding the limitation on recovery in the Assured clause a breach of this condition shall not afford the Underwriters any defense to a claim by a Mortgagee who has accepted this Policy without knowledge of such breach: 210
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 (a) DISBURSEMENTS, MANAGERS' COMMISSIONS, PROFITS OR EXCESS OR INCREASED VALUE OF HULL AND MACHINERY, AND/OR SIMILAR INTERESTS HOWEVER DESCRIBED, AND FREIGHT (INCLUDING CHARTERED FREIGHT OR ANTICIPATED FREIGHT) INSURED FOR TIME. An amount not exceeding 212
 in the aggregate 25% of the Agreed Value. 213
 214
 (b) FREIGHT OR HIRE, UNDER CONTRACTS FOR VOYAGE. An amount not exceeding the gross freight or hire for the current cargo passage and next succeeding cargo passage (such insurance to include, if required, a preliminary and an intermediate ballast passage) plus the charges of insurance. In the case of a voyage charter where payment is made on a time basis, the amount shall be calculated on the estimated duration of the voyage, subject to the limitation of two cargo passages as laid down herein. Any amount permitted under this Section shall be reduced, as the freight or hire is earned, by the gross amount so earned. Any freight or hire to be earned under the form of Charters described in (d) below shall not be permitted under this Section (b) if any part thereof is insured as permitted under said Section (d). 215
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 (c) ANTICIPATED FREIGHT IF THE VESSEL SAILS IN BALLAST AND NOT UNDER CHARTER. An amount not exceeding the anticipated gross freight on next cargo passage, such amount to be reasonably estimated on the basis of the current rate of freight at time of insurance, plus the charges of insurance. Provided, however, that no insurance shall be permitted by this Section if any insurance is effected as permitted under Section (b). 218
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 (d) TIME CHARTER HIRE OR CHARTER HIRE FOR SERIES OF VOYAGES. An amount not exceeding 50% of the gross hire which is to be earned under the charter in a period not exceeding 18 months. Any amount permitted under this Section shall be reduced as the hire is earned under the charter by 50% of the gross amount so earned but, where the charter is for a period exceeding 18 months, the amount insured need not be reduced while it does not exceed 50% of the gross hire still to be earned under the charter. An insurance permitted by this Section may begin on the signing of the charter. 220
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 (e) PREMIUMS. An amount not exceeding the actual premiums of all interest insured for a period not exceeding 12 months (excluding premiums insured as permitted under the foregoing Sections but including, if required, the premium or estimated calls on any Protection and Indemnity or War Risks and Strikes insurance) reducing pro rata monthly. 224
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 (f) RETURNS OF PREMIUM. An amount not exceeding the actual returns which are recoverable subject to "and arrival" or equivalent provision under any policy of insurance. 227
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 (g) INSURANCE IRRESPECTIVE OF AMOUNT AGAINST.—Risks excluded by War, Strikes and Related Exclusions clause; risks enumerated in the American Institute War Risks and Strikes Clauses; and General Average and Salvage Disbursements. 232
 233
 234
 235
 236
 237
 238

WAR STRIKES AND RELATED EXCLUSIONS

The following conditions shall be paramount and shall supersede and nullify any contrary provisions of the Policy. 239
 This Policy does not cover any loss, damage or expense caused by, resulting from, or incurred as a consequence of: 240
 (a) Capture, seizure, arrest, restraint or detention, or any attempt thereat; or 241
 (b) Any taking of the Vessel, by requisition or otherwise, whether in time of peace or war and whether lawful or otherwise; or 242
 (c) Any mine, bomb or torpedo not carried as cargo on board the Vessel; or 243
 (d) Any weapon of war employing atomic or nuclear fission and/or fusion or other like reaction or radioactive force or matter; or 244
 (e) Civil war, revolution, rebellion, insurrection, or civil strife arising therefrom, or piracy; or 245
 (f) Strikes, lockouts, political or labor disturbances, civil commotions, riots, martial law, military or usurped power; or 246
 (g) Malicious acts or vandalism, unless committed by the Master or Mariners and not excluded elsewhere under this War Strikes and Related Exclusions clause; or 247
 248
 (h) Hostilities or warlike operations (whether there be a declaration of war or not) but this subparagraph (h) not to exclude collision or contact with aircraft, rockets or similar missiles, or with any fixed or floating object, or stranding, heavy weather, fire or explosion unless caused directly by a hostile act by or against a belligerent power which act is independent of the nature of the voyage or service which the Vessel concerned or, in the case of a collision, any other vessel involved therein, is performing. As used herein, "power" includes any authority maintaining, naval, military or air forces in association with a power. 249
 250
 251
 252
 253
 If war risks or other risks excluded by this clause are hereafter insured by endorsement on this Policy, such endorsement shall supersede the above conditions only to the extent that the terms of such endorsement are inconsistent therewith and only while such endorsement remains in force. 254
 255

Printed in U.S.A.

This is the form, which covers the hull of our vessels. It is the American Institute Hull Clauses and it refers to the situations that are our vessels our covered from the insurance company.

First of all, the policy mentions who is the insured. The insured is Nautilus Inc., which is the owner of the vessels. Only Nautilus Inc., our company, can have claims against the insurance company as for the three vessels that it owes, Kemal 3, Mustafa and Arman. At the loss payee, it is written our name and also the bank that we have taken the loan, which is HSH-Nordbank. HSH-Nordbank is one of the biggest investors to the shipping industry.

At the clause for vessel, it is written the vessel Kemal 3. There are also the same policies for the other two vessels. The policy will not cover all the vessels together but it will for each one separately. The duration that our vessel is covered by the insurance policy is from 10/15/11 to 10/14/12. If the contract expires and the vessel is at the sea, or in distress, or at a port of refuge or of cal, then it is our responsibility to communicate with the insurance company and ask for a pro rata monthly premium to her port of destination. Total loss payment terminates the policy.

At the agreed value there is the value that Nautilus Inc. and the underwriters agreed. The process of evaluation is very important if there is a total loss of the ship. It is crucial to have an estimation of the vessel every year according to the market analysis. The value of the ship is a second hand price.

With this estimation ship value is not too high or too little comparing with other ships having the same characteristics. In order to agree to this value, we considered the ship, the machinery, provisions and stores, money advance for seaman and the equipment that we have leased.

The agreed value for our ship will be \$90.000.000 plus a 15% of this price. This means that the total agreed value is \$103.500.000. This extra 15% is for the equipment that we need to lease, the stores and the market fluctuation.

At any accident that happens to our vessel it should be deducted the amount of \$150000 unless there is a total loss when this clause is not applicable there. Any damage happens as a result of this accident it should be as a part of this accident. Moreover, any accident between two ports because of bad weather should be considered as one accident.

- The policy refers to the premium that we have to pay to the insurance company. This amount is 0.25% the cost of the vessel which \$90.000.000. So, this means that the premium that we have to give is \$225.000 per year.

Cancellation of the policy by the underwriters can happen if our company does not pay the premium 30 days after the attachment. If there is a total loss before there is a cancellation then our company is obliged to pay the premium.

At the adventure clause, there are some activities, which are excluded from the policy. Institute Warranty Limits are the limitations of the areas of the world. There are some areas that are accessible but there are some areas which are dangerous because of ice for example.

Our vessels are not supposed to go to these areas. If they are going to pass through IWL there is no cancellation but we should inform the insurance company as soon as possible and also pay an additional premium. Other activities that are excluded from the policy are loading and discharging at sea, no towage and no salvage operations.

A vessel is open to many perils in the sea and that is why the marine insurance is obligatory. At the perils clause there are all the perils that are covered by the policy. After damage happens, there would an investigation in order to prove that the cause of this damage was a peril included in the policy. Among the perils that are mentioned, there is coverage for lightning, earthquake, pirates, thieves, arrests and others that are mentioned in the clause. Many of them, like piracy, will then be excluded from the policy.

There are also additional perils covered by the policy. For example, there is coverage for explosion on shipboard or elsewhere, contact with aircraft, rockets or similar missiles or with any land conveyance. There is also exemption from negligence of Masters, Officers, Crew or Pilots.

The accident of Torrey Canyon was the reason to include in the policy the deliberate damage (pollution hazard). At this case, the vessel was destroyed, after an accident it had, by the English government, preventing a huge environmental pollution. As a result of this, this clause covers the case that a government damages intentionally the vessel in order to protect the environment.

If an accident takes place, then our company has the right to ask for a claim from the insurance company. The insurance company should be noticed and:

- Advised before the survey and maybe send its own surveyor
- Decide whether the vessel shall proceed for docking or repair
- Put a veto for the repair firm proposed
- The underwriters may take tenders or may require in writing what tenders were taken for the repairs. After the acceptance of the underwriters, an allowance would be made at the rate of 30 percent per annum on the amount insured, for each day or pro rata for part of a day, for time lost between the issuance of invitations to tender and the acceptance of a tender, to the extent that such time is lost solely as the result of tenders having been taken and provided the tender is accepted without delay after receipt of the underwriters' approval.

The other clause is about General Average and Salvage. General Average exists when an extraordinary sacrifice or expenditure is voluntarily and reasonably made or incurred in time of a peril for the purpose of preserving the property imperiled in the common adventure. When there is a General Average Loss, the parties participated in the adventure – ship, cargo, freight at risk each contribute to that loss on the basis of their value at the end of the adventure.

A particular Average is a partial loss borne by one party. The repairs should not be greater than the hull value.¹⁸

General Average and Salvage should be payable as they appear in the contract of affreightment. During the salvage, towage or other assistance, if any vessel which our ownership help the procedure then there should be an award constituted under this policy.

There are two types of Total Loss. The first is the physical destruction, the loss of specie or irretrievable debridement. There is also the constructive Total Loss that refers to the case when the cost of recovering and repairing the vessel would exceed the agreed value. The evaluation whether the vessel is a constructive Total Loss, is based on the value to repair it. This cost can be found from similar accidents

The sue and labor clause permits to our company to sue, labor and travel for, in, and about the defense, safeguard and recovery of the vessel. This means that our company can ask for some measurements in order to protect the vessel and avoid any further damages. This could be some extra work from the labor.

¹⁸ Professor Lars Gustafson notes

When there is a collision with another ship, our insurance company has the obligation to pay us for the damages. This amount has to be in connection with the agreed value. If there is a total loss and damage to the other vessel then the insurance company pays two times the insurable amount (plus dues and labor expenses). The expenses for the following are not covered in the collision liability, These expenses are covered by the P&I:

- Wreck removals
- Property injuries
- Clean up of oil spills or other pollutants
- Cargo or other engagements of the vessel
- Loss of life or injury

Under the pilotage and towage clause, the American Institute Hull Clauses suggests that pilotage or towage services are provided to our company only if we assume liability for damage resulting from collision of the insured vessel with another vessel including the towing vessel or to reimburse those who provided us with the pilotage and towage services against loss or liability for any such damages.

There are some events that can terminate the policy with our insurance company. These events are:

- Change in the ownership or flag of the vessel (Panama, Liberia- our vessels)
- Placement of the vessel under new management
- Chartering or requisition of the vessel on a bareboat basis
- Change, cancellation or withdrawal of the vessel's classification society (IACS- our vessels) or the vessel's class

If any event of these happens, then we are supposed to inform the insurance company and if they accept the changes, maybe we need to pay an extra premium. Fewer than two reasons there can be temporary postponement of the termination. These are:

1. If our vessel is at the sea then the termination comes when our vessel reaches a port to load or to discharge cargo
2. If our vessel is requisitioned so there is an involuntary temporary transfer of the vessel. In this case, the cancellation comes fifteen days after the transfer of the vessel.

If there is a total loss of the vessel, there are some limitations of the amounts of the additional insurance that can be purchased by the assured, owners, managers, operators or mortgagees.¹⁹

At the disbursements and at the increased value of hull and machinery, the amount cannot exceed in the aggregate 25% of the agreed value. Insurance on freight insured for time is included at the 25% mentioned before. Insurance "on freight on hire, under contracts of voyages" is limited to the amount of the gross freight or hire for the current cargo passage and the next succeeding cargo passage, plus the premium for this insurance. Insurance "on anticipated freight if the vessel sails in ballast and not under charter" is limited to the amount of the anticipated freight on the next cargo passage plus the premium for this

¹⁹ Flitner, *Ocean Marine Insurance*, AICPCU, 3rd edition, 2008, p.4.22-4.24

insurance. Insurance on "time charter hire or charter hire for series of voyages is limited to the amount not exceeding 50 percent of the gross hire to be earned under the charter.

Premiums should not exceed the actual premiums of the interest insured for a period not exceeding 12 months. Returns of premiums can happen when the actual premiums are returnable. Finally, there is the option for our company to purchase additional insurance (no limited amount) for:

1. Risks that are excluded from war risks, strikes and related exclusion clauses
2. Risks covered in the American Institute War Risks and Strike Clauses
3. General Average and salvage disbursements against a subsequent total loss.

At the end of the policy, there are some exceptions of the risks that cover our vessels. Among these risks are capture and arrest of the ship, requisition of the ship, mine, bomb or torpedo to the vessel. Nuclear actions are excluded because they cause great environmental pollution and as a result of this they cost a lot of money. Civil wars and piracy are excluded. Piracy is a problem because it affects the trip of our ships passing near Somalia where there are numerous actions of pirates. There is also exemption from strikes, lockouts, malicious acts or vandalism and hostilities or warlike operations.

At the hull policy we have to add some other insurance. An important term is the liner negligence. Liner negligence is important and it costs nothing to be added at the policy. Here is an example that describes this term. If a pipeline at the master's room explodes and destroys the room. Then, it will be proved

that the pipeline was not maintained well and that is the cause of the accident. With the current policy the insurance company because of the lack of maintenance will cover only the room. With the liner negligence the pipeline will also be covered by the insurance company.

Our vessels pass from Somalia and Malacca islands so they are exposed to pirates. There is a kidnapping insurance that will be bought by our company. It costs about \$18.000 and there is a limit of \$3.000.000. We are going to pay \$11.000 more for coverage for loss of hire. The limit for this coverage is \$2.000.000.

We are going to insure our vessel for a war risk because it is not included in the policy. The cost of this insurance is 0.03% of the agreed value, which means \$27.000.²⁰

²⁰ Interview with Professor Lars Gustafson

7.2.3 - Protection & Indemnity (P&I)

P&I is another type of insurance. P&I appeared because the British hull insurances were covering only the 3/4 Collision liabilities. So the other 1/4 was covering by P&I. later, they started offering third party liabilities to crew passengers and cargo. P&I are owned by the ship owners who insure their vessels by entering them into the club. At the P&I clubs the ship owner pays the advance call, which is the amount that he pays to the club at the beginning of the year, and the supplementary call, which is a premium that he pays after the coverage year, has ended. Generally, P&I covers operational risks and not business risks.²¹

The P&I club we chose to insure our vessels is the Gard. Gard is a Norwegian club with a very good reputation. Our decision for this club was based on the fact that it is one of the financially strongest groups in the world. It has great liquidity, which is very important for a P&I club. It is also one of the largest P&I clubs in the world. Finally, it has a high proportion of tankers and there is a special liability for tankers. Our vessels have also flags of convenience and classification approved.

The premium that we are going to pay at the Gard is \$160.000 per year. This amount is calculated from the GT of our vessels. The premium is also

²¹ Flitner, Ocean Marine Insurance, AICPCU, 3rd edition, 2008 p. 6.3

depended on the company. We are an existing company with good reputation. P&I coverage starts at 20th of February each year. The total amount can be paid in three doses on 20th March, on 5th July and on 5th November. Apart from \$160,000, we will pay some extra money for the time that our vessels operate until 20th of February. So, we divide \$160,000 with 365 days of the year. The result is \$435.50. Our vessels will be insured at the P&I for 125 days more. That means an extra amount for \$54,437. We will also have to pay about \$3,000 for the surveyors that are going to check our vessels. The survey is done at the entry of our vessels to the P&I. Before the survey, we have to disclose the exact condition of our vessels because the P&I are based on mutual trust.

What covers the P&I is mentioned at the contract that the two parts sign. P&I covers the liability in respect of crew. This means that in case of an accident of a member of the crew, P&I covers the hospital, the wages, any expenses for traveling of the crew and compensations that may arise. These will be covered under the condition that it will not be any breach of the contract or sale of the ship or termination of the agreement or any other act of the member in respect of the ship.

There is also coverage of liability for injury and other expenses for passengers of the vessel and people carried on board. These people should have a permission to be on board. Gard offers coverage for costs and expenses if the ship has stowaways, refugees and any people that saved their life at the sea.

Cargo liability is mainly covered by the charterer but P&I club also offers for the ship owner. Cargo liability covers the ship owner for the loss or damage of the cargo when a member of the crew due to his negligence, did not properly load or discharge the cargo. There is coverage if the cargo was transported by another means of transportation and it was ship's duty to transport it.

There is also coverage for handling or discharging the cargo upon damages or loss of the cargo because of the deductible that applies at the standard terms. The cost and the expenses are covered in discharging or disposing the cargo, which has been rejected by the consignee.

Gard offers an extended coverage to any person who was incurred from the collision with other vessels. As it is mentioned at the rules, under the collision liability, it is covered:

- 1/4 of the liability incurred by the member;
- 4/4 of such liability
- or such other fraction of such liability as may be applicable and have been agreed with the Association;

Moreover, that part of the Member's liability which exceeds the sum recoverable under the Hull Policies solely by reason of the fact that the liability exceeds the sums insured under those policies, provided that:

- The Member shall not be entitled to recover from the Association any deductible borne by him under the Hull Policies; and
- Cover under this Rule shall exclude liability in respect of persons or property on board the Ship.

Loss or damaged from any fixed or floating object is covered by the P&I if it is not covered by the hull policy and also that amount that member's liability exceeds the amount under the hull policy. Pollution is a matter of great issue. Our P&I offers coverage from oil pollution but not including the fines. Costs and expenses that have arisen from raiding, removal, destruction, lighting and marking of the vessel or wreckage of the vessel are covered by the P&I club.

There is also coverage to the General Average where it is not covered by the hull clauses. Towage is also covered by Gard. Towage should be according to the plan, entering or leaving port and a contract that has been approved by the association. There is no coverage for towing in case of wreck removal only if the purpose is to save life at sea. If there is a possibility for a claim to the P&I, then the legal costs are covered by the club. The enquiry costs and expenses are also covered in a similar case.

P&I club covers liability for fines that may arise from the following cases:

- Failure to comply with the rules of delivering the cargo and having the appropriate documentation
- Breach of any immigration regulations
- Oil pollution that takes place taken into account the limitation of the policy
- Smuggling any custom law but not referring to the cargo

- Quarantine orders or disinfection of the ship in case of a disease to the crew are covered by the P&I. The ship owners have to know any ports that may be quarantined.²²

Freight Demurrage Defense (FDD) is covered by the P&I and it costs \$10,000 per year. This covers any expenses incurred in contractual disputes, for example at the bill of lading or charter parties.

²² <http://www.gard.no/gard/Publications/statutesandrules/index2.html>

8 Conclusions and recommendations

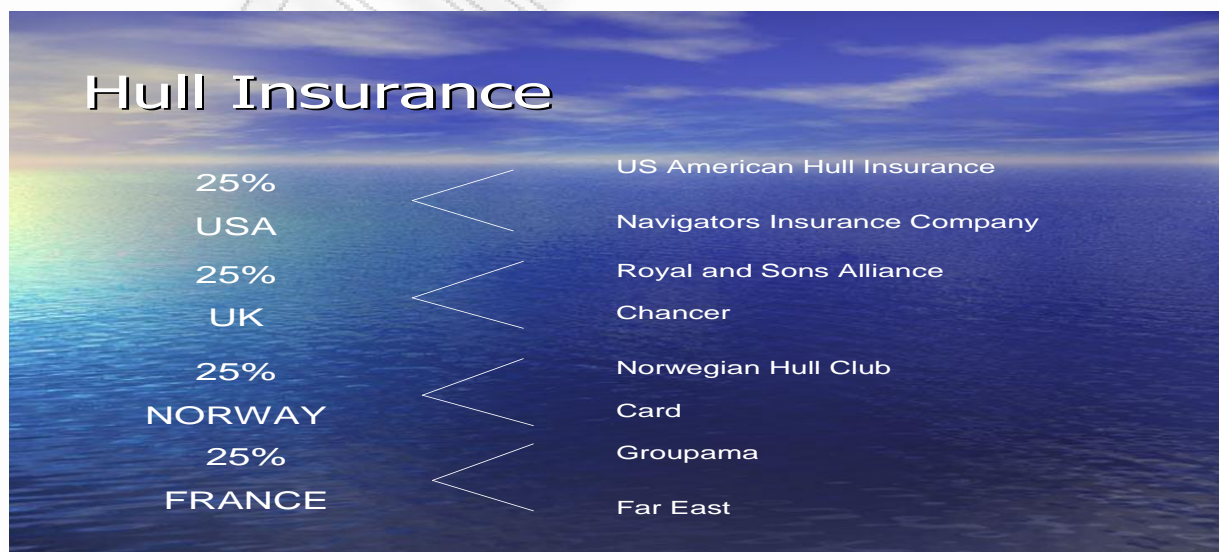
During the examination and analysis of this project we found useful information about different sectors. Due to the disunion of the capstone in the 3 sectors: operations finance and P&I (insurance) we had the ability to examine in depth all the parts of the business plan both as a unit but also in total.

First of all, the company uses the structure of grid. The reason is the ability to have double managers to each decision. It is more flexible than other structures. As a result of this structure the company has the ability to double check the decisions and also provides more co operation in the company and brainstorming among the managers.

The new buildings are going to be build in Chinese shipyards. Chinese shipyards provide cheap labour for nautilus company and also the shipyards have know how in the construction of vessels. The Panamanian registry is also a strategical benefit for this business plan due to the fact that the company is going to have tax discounts, ability for dual registry and also fleet discounts. On the other had the Liberian registry is acceptable to banks and also more flexible with the nationality of the crew.

Lloyd's class is also an important factor both for the operation of the vessels but also for the customers of the company. Lloyds provide stronger trust to the customers and much better quality of transportation.

Hull insurance is going to be split in 4 different institutes-companies. This is a standard method of shifting and reducing the risk.



The company is going to select Gard as a protection and indemnity club. Gard is one of the financially strongest and largest P&I clubs in the world, with excellent reputation. Additional information about Gard is that this P&I club is specializing tankers.

The company is going to use long term time chartering strategy and that is going to provide standard cash flows ,it is also going to be easier to find charterer and reduces the risk of not having cargo.

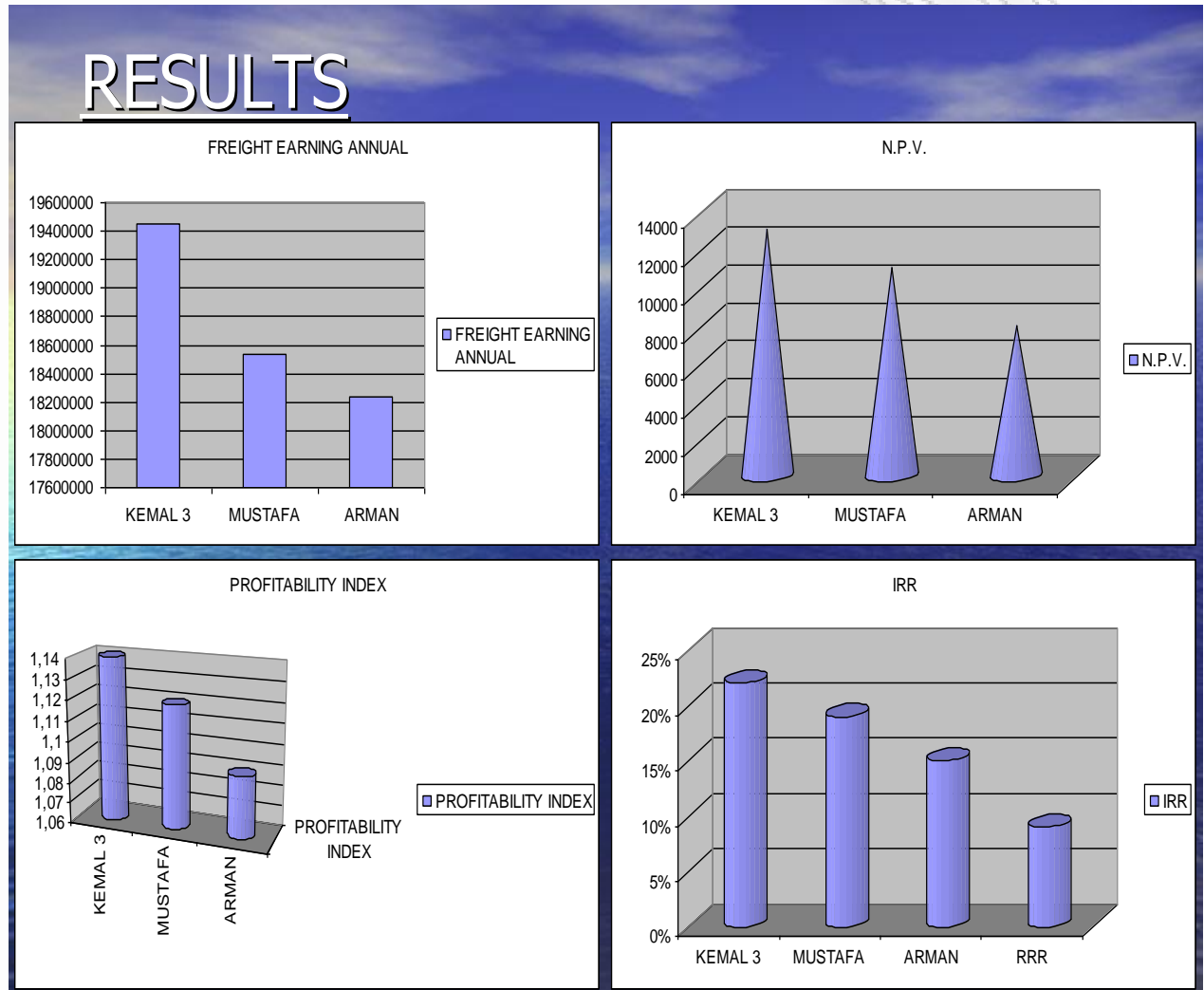
The chain about the chartering sector is going to be like this:



The difference in the earning freight between the three recently built vessels because one of the vessels was chartered in a different time period. The operation cost of each vessel is increasing every year for a small percent due to the increases of the salaries of the crew and the extra maintenance of the vessel after each year of operation. The decrease in the working capital is due to economies of scope that the company is going to enter after the purchase and operation of the third vessel. The financial analysis of the business plan is for 4 year after the vessels are delivered. A financial analysis for profitability of the vessel for any additional year would be inefficient, due to fluctuations in the economy. The initial operation cost of the vessels is different. This issue is due to the fact that the company at the beginning

does not have the ability to pay a lot of money so the company has to reduce the operation cost of the vessels.

FINANCIAL RESULTS



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APPENDIX

General Voyage Plan from Libya to South Korea.

WP	Name	Lat	Lon	Distance	Course	Total Distance
0	Az Zuwaytinah, Libya	30° 53.452' N	020° 01.031' E	XXXX	XXXX	XXXX
1	Alpha Anchorage	30° 55.664' N	019° 51.749' E	8.28 nm	285.5 °	8.28 nm
2		32° 00.073' N	019° 29.851' E	66.94 nm	343.8 °	75.23 nm
3		33° 23.455' N	021° 00.581' E	113.08 nm	042.6 °	188.30 nm
4		31° 50.021' N	031° 36.452' E	545.11 nm	099.8 °	733.41 nm
5		31° 43.930' N	031° 58.052' E	19.39 nm	108.3 °	752.80 nm
6		31° 31.132' N	032° 12.950' E	18.02 nm	135.1 °	770.82 nm
7	SuezCanal Anchorage	31° 23.703' N	032° 19.527' E	9.31 nm	142.8 °	780.13 nm
8	ENTER - Suez Canal	31° 22.434' N	032° 23.285' E	3.46 nm	111.5 °	783.59 nm
9		31° 17.263' N	032° 21.767' E	5.32 nm	194.1 °	788.91 nm
10		31° 13.456' N	032° 20.674' E	3.91 nm	193.9 °	792.82 nm
11		31° 06.069' N	032° 18.498' E	7.60 nm	194.2 °	800.42 nm
12		30° 58.291' N	032° 18.734' E	7.76 nm	178.5 °	808.19 nm
13		30° 48.206' N	032° 19.037' E	10.07 nm	178.5 °	818.25 nm
14		30° 47.306' N	032° 18.935' E	0.90 nm	185.6 °	819.15 nm
15		30° 44.763' N	032° 19.457' E	2.58 nm	169.9 °	821.73 nm
16		30° 43.218' N	032° 20.511' E	1.79 nm	149.5 °	823.52 nm
17		30° 42.528' N	032° 20.637' E	0.70 nm	171.0 °	824.22 nm
18		30° 42.197' N	032° 20.615' E	0.33 nm	183.3 °	824.55 nm
19		30° 37.067' N	032° 19.431' E	5.22 nm	191.3 °	829.77 nm
20		30° 35.810' N	032° 18.756' E	1.38 nm	204.9 °	831.15 nm
21		30° 35.135' N	032° 18.418' E	0.73 nm	203.4 °	831.88 nm
22		30° 34.345' N	032° 18.212' E	0.81 nm	192.7 °	832.69 nm
23		30° 33.764' N	032° 18.225' E	0.58 nm	178.9 °	833.27 nm
24		30° 32.818' N	032° 18.611' E	1.00 nm	160.6 °	834.27 nm
25		30° 31.032' N	032° 20.070' E	2.18 nm	144.7 °	836.45 nm
26		30° 30.564' N	032° 20.251' E	0.49 nm	161.5 °	836.95 nm
27		30° 23.823' N	032° 21.660' E	6.83 nm	169.7 °	843.78 nm
28		30° 21.481' N	032° 22.163' E	2.38 nm	169.5 °	846.16 nm
29		30° 16.751' N	032° 26.430' E	5.99 nm	142.0 °	852.15 nm
30		30° 15.314' N	032° 31.310' E	4.46 nm	108.7 °	856.61 nm
31		30° 15.007' N	032° 31.918' E	0.61 nm	120.2 °	857.22 nm
32		30° 14.612' N	032° 32.278' E	0.50 nm	141.6 °	857.72 nm

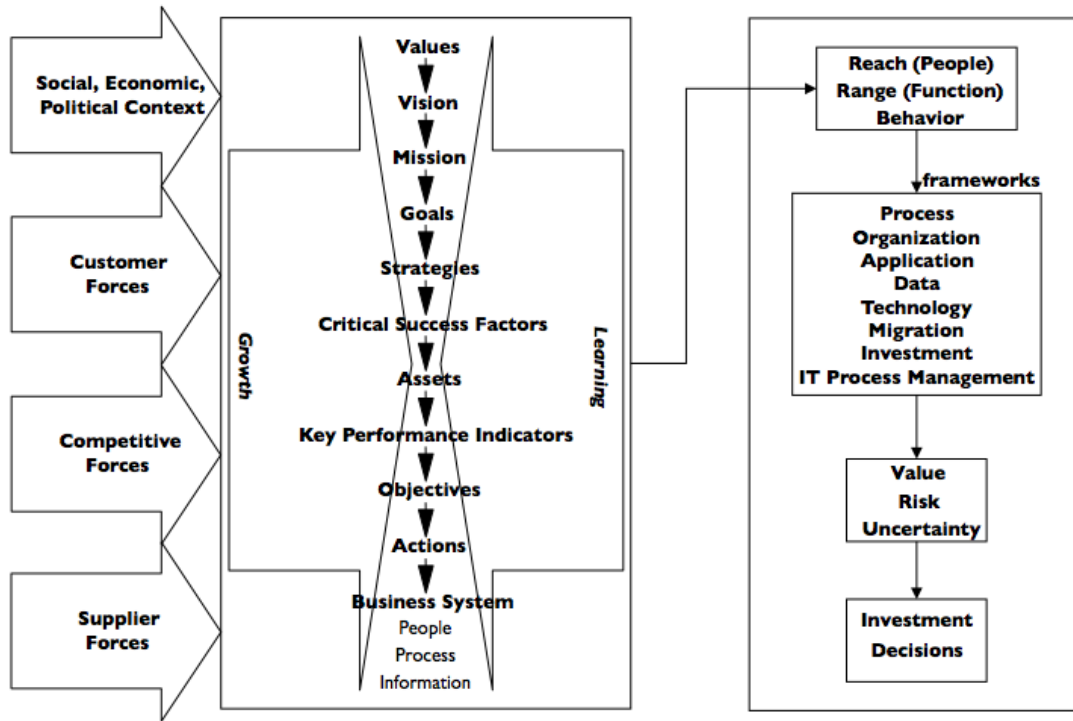
33		30° 12.077' N	032° 33.933' E	2.91 nm	150.4 °	860.63 nm
34		30° 11.503' N	032° 34.063' E	0.58 nm	168.9 °	861.21 nm
35		30° 03.609' N	032° 34.293' E	7.88 nm	178.5 °	869.09 nm
36		29° 58.954' N	032° 35.128' E	4.70 nm	171.1 °	873.79 nm
37		29° 58.075' N	032° 35.150' E	0.88 nm	178.8 °	874.67 nm
38		29° 57.601' N	032° 35.042' E	0.48 nm	191.2 °	875.15 nm
39		29° 57.215' N	032° 34.905' E	0.40 nm	197.2 °	875.55 nm
40		29° 56.754' N	032° 34.625' E	0.52 nm	207.9 °	876.07 nm
41		29° 56.586' N	032° 34.488' E	0.21 nm	215.3 °	876.28 nm
42		29° 55.938' N	032° 33.755' E	0.91 nm	224.6 °	877.19 nm
43		29° 55.452' N	032° 33.093' E	0.75 nm	229.9 °	877.94 nm
44		29° 54.492' N	032° 32.676' E	1.02 nm	200.7 °	878.96 nm
45		29° 53.115' N	032° 32.870' E	1.38 nm	173.0 °	880.35 nm
46		29° 51.162' N	032° 33.177' E	1.97 nm	172.2 °	882.31 nm
47	EXIT - Suez Canal	29° 46.189' N	032° 31.217' E	5.25 nm	199.0 °	887.56 nm
48		29° 37.692' N	032° 31.067' E	8.48 nm	180.9 °	896.04 nm
49		28° 48.384' N	032° 52.926' E	52.77 nm	158.7 °	948.81 nm
50		28° 10.263' N	033° 17.563' E	43.78 nm	150.3 °	992.59 nm
51		27° 51.433' N	033° 41.074' E	28.03 nm	132.1 °	1020.62 nm
52	ENTER - Red Sea	27° 22.025' N	034° 11.961' E	40.16 nm	136.9 °	1060.78 nm
53		27° 00.538' N	034° 29.662' E	26.61 nm	143.6 °	1087.39 nm
54		15° 55.544' N	041° 31.273' E	770.13 nm	149.4 °	1857.52 nm
55		14° 11.336' N	042° 15.011' E	112.06 nm	157.8 °	1969.58 nm
56	EXIT - Red Sea	13° 29.777' N	042° 35.067' E	45.75 nm	154.8 °	2015.33 nm
57		13° 12.552' N	043° 02.156' E	31.49 nm	123.0 °	2046.82 nm
58		12° 36.165' N	043° 19.860' E	40.14 nm	154.5 °	2086.96 nm
59		12° 30.045' N	043° 30.028' E	11.66 nm	121.5 °	2098.63 nm
60	Gulf of Aden	12° 24.143' N	044° 30.007' E	58.98 nm	095.7 °	2157.60 nm
61	Arabian Basin	13° 37.805' N	054° 59.915' E	619.27 nm	083.2 °	2776.88 nm
62	**Great Circle**	08° 50.201' N	074° 59.295' E	1212.58 nm	103.7 °	3989.45 nm
63	South or Sri Lanka	05° 28.008' N	080° 00.589' E	360.79 nm	123.9 °	4350.24 nm
64		05° 27.406' N	093° 21.302' E	798.53 nm	090.0 °	5148.78 nm
65	Great Channel	06° 15.004' N	095° 15.653' E	123.41 nm	067.4 °	5272.19 nm
66	Straits of Malacca	05° 30.937' N	098° 32.511' E	201.02 nm	102.6 °	5473.21 nm
67		02° 55.287' N	100° 44.369' E	203.33 nm	139.6 °	5676.55 nm
68		02° 34.535' N	101° 24.712' E	45.34 nm	117.1 °	5721.89 nm
69		01° 53.407' N	102° 14.104' E	64.18 nm	129.6 °	5786.07 nm
70		01° 38.121' N	102° 47.516' E	36.75 nm	114.4 °	5822.83 nm
71		01° 23.166' N	103° 11.039' E	27.86 nm	122.3 °	5850.69 nm
72		01° 12.199' N	103° 23.172' E	16.33 nm	131.9 °	5867.02 nm
73	Singapore Strait	01° 02.210' N	103° 39.333' E	19.00 nm	121.6 °	5886.02 nm
74		01° 05.356' N	103° 43.633' E	5.32 nm	054.0 °	5891.34 nm
75		01° 09.913' N	103° 47.717' E	6.11 nm	042.0 °	5897.45 nm
76		01° 13.776' N	103° 56.466' E	9.57 nm	066.3 °	5907.02 nm
77		01° 16.805' N	104° 20.000' E	23.76 nm	082.7 °	5930.78 nm
78	Middle Channel	01° 29.960' N	104° 34.728' E	19.72 nm	048.4 °	5950.50 nm
79		03° 30.094' N	105° 41.843' E	137.12 nm	029.3 °	6087.63 nm
80		04° 05.907' N	106° 59.869' E	85.75 nm	065.4 °	6173.38 nm
81	China Sea	07° 02.231' N	109° 10.403' E	218.47 nm	036.6 °	6391.85 nm
82		10° 33.368' N	111° 00.024' E	236.51 nm	027.3 °	6628.36 nm
83		16° 38.351' N	114° 00.064' E	403.44 nm	025.7 °	7031.81 nm
84		22° 59.983' N	119° 51.680' E	504.29 nm	041.1 °	7536.10 nm
85	Taiwan Strait	24° 30.230' N	119° 59.955' E	90.27 nm	004.8 °	7626.37 nm
86	Korean Strait	35° 00.060' N	129° 25.000' E	797.21 nm	038.0 °	8423.58 nm

87	^Great Circle^	35° 23.726' N	129° 25.000' E	23.63 nm	000.0 °	8447.21 nm
88		35° 27.962' N	129° 23.869' E	4.33 nm	347.7 °	8451.54 nm
89	Terminal A	35° 28.724' N	129° 23.754' E	0.77 nm	353.0 °	8452.30 nm
90	Ulsan, South Korea	35° 28.724' N	129° 23.479' E	0.22 nm	270.1 °	8452.53 nm

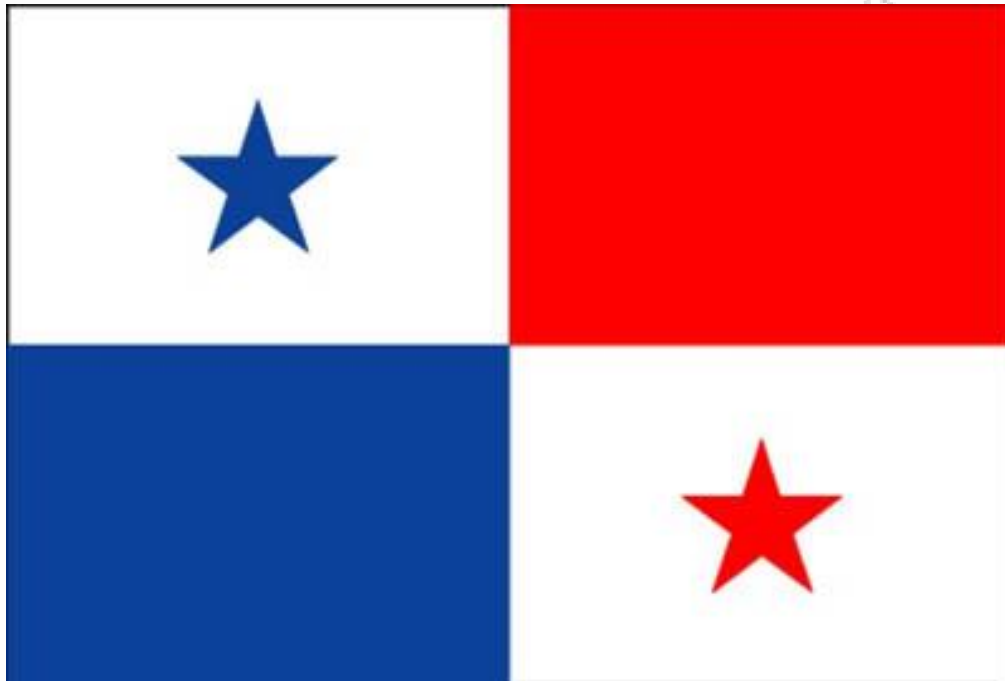
Chart of Voyage from Libya to South Korea.



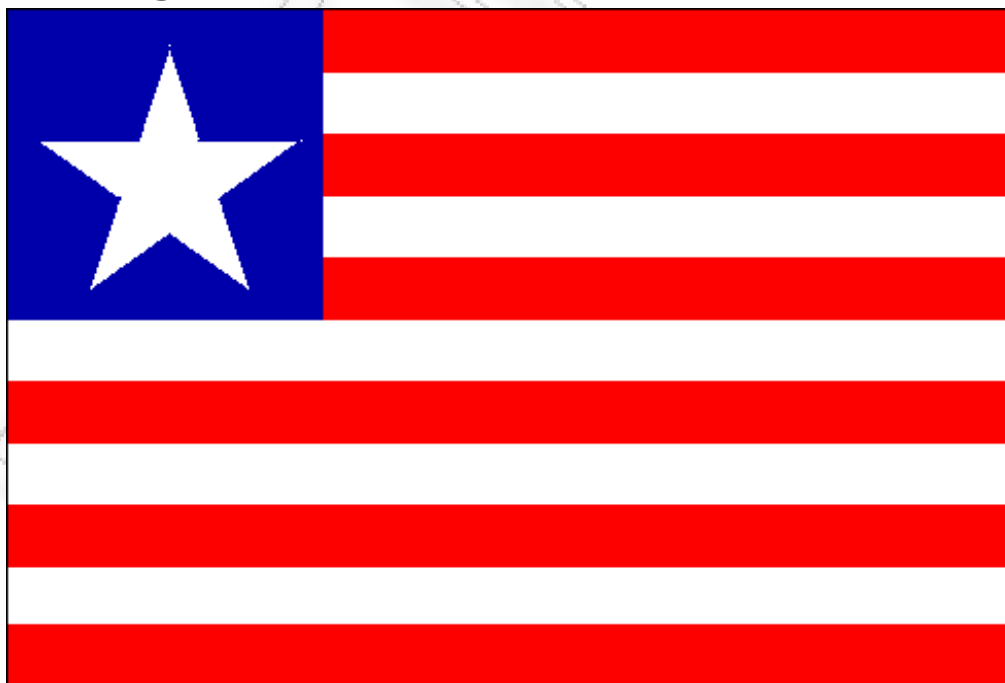
Business Configuration



Panama Flag



Liberian Flag





Loading arms

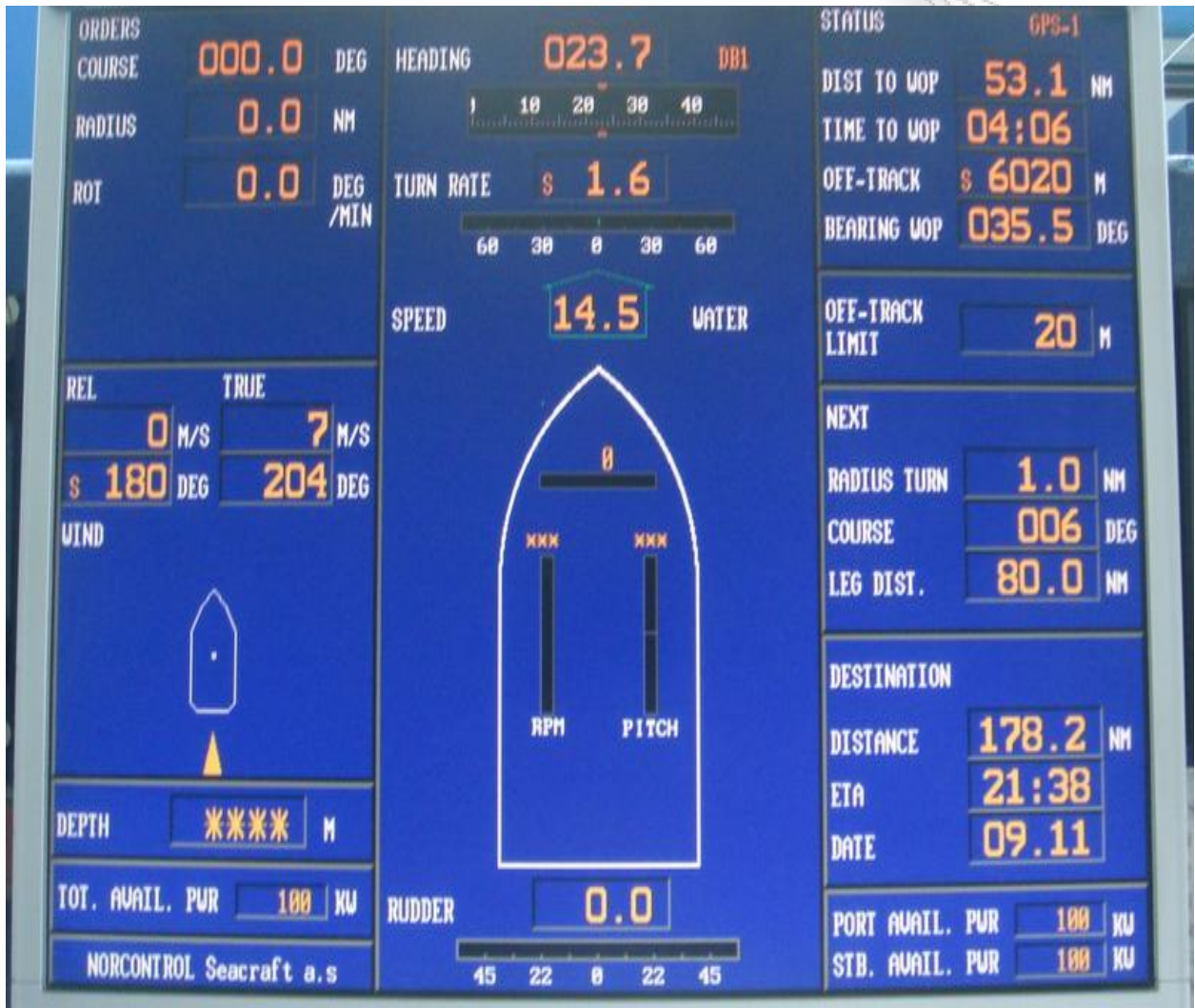
PAWELK

	ENGINE ORDER	LEVER POSITION	RPM	SPEED (Kn)
AHEAD	FULL	6.4	75	10.5
	HALF	5.5	64	8.0
	SLOW	4.3	47	6.5
	DEAD SLOW	2.5	40	4.0
ASTERN	DEAD SLOW		47	-
	SLOW		70	-
	HALF		76	-
	FULL		80	-

BARRED SPEED RANGE 40 - 58 RPM

16 10:03

Engine order -Level position



Control panel during loading

A	ALFA	N	NOVEMBER
B	BRAVO	O	OSCAR
C	CHARLIE	P	PAPA
D	DELTA	Q	QUEMPEK
E	EKO	R	ROMEO
F	FOXTROT	S	SIERA
G	GOLF	T	TANGO
H	HOTEL	U	UNIFORM
I	INDIA	V	VICTOR
J	JULIET	W	WHISKY
K	KILLO	X	X-RAY
L	LIMA	Y	YANKEE
M	MIKE	Z	ZULU

National nautical alphabet