Why logistics is important history essay

“ Logistics is defined as the process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements.” Note that this definition includes inbound, outbound, internal, and external movements, and return of materials for environmental purposes” (Council of Logistics Management, 2011).

Logistics has played an important part in human society since the early known recollection. Land based logistics is the oldest form of transportation since before recorded history and is still in use today. Land based logistics has evolved with technology to incorporate many different kinds of transportation. All of these technological advancements have made it easier for human life to flourish. These advancements in technology have allowed human kind to also explore and interact with each other around the world.

Sea based logistics is the second oldest form of transportation. Sea based logistics has become made exploratory and mapping of the world possible. Sea based logistics allows many of the developed countries to continue to advance. Sea based logistics also allows for under developed countries to benefit from the advancements made in by developed countries. The further advancements in sea based logistics can provide peace and prosperity for the entire planet.

Air based logistics is the newest in the transportation realm. Air based logistics is used by both civilian and military departments. There are many new concepts that are arising from old technology to make air based

logistics more manageable. Although air based logistics is fairly new, there are still many bugs to work out in the system. Air based logistics is the newest and fastest way of delivering passengers and cargo.

It is important to understand each and every one of these types of transportations. Land based transportation has brought villages closer together. Sea based transportation allows from products to travel across the world at ample speed. Air based logistics allows for the rapid delivery of cargo and passengers. These types of transportation made logistics easier to manage. But with the management of these types of transportation there is also disaster.

Land-Based Logistics

Land based logistics is the oldest form of transportation. Even before there were combustion engines many walked between their destinations. They also carried their goods for trade and barter. No one knows when the domestication of animals took place but it made travelling faster as well as carrying a greater amount of cargo. An example of this can be seen in the “ ships of the desert” also known as camel caravans or camel trains (Thompson, 1998).

It is uncertain who invented the wheel, according to many archaeologists it is presumed to have been invented around 8000 B. C. in Asia, although the oldest wheel that has been discovered in Mesopotamia and dates back to 3500 B. C. (ThinkQuest, 2010). Along with the wheel and domestication of animals, great inventions came along such as the chariot and more modernly the horse drawn carriage. Although these types of transportation are vital in

third, fourth and fifth world countries, it is rarely used in developed countries.

Human kind has not been satisfied with animal power. The invention of steam and combustion engine during the industrial revolution has allowed for greater transport and logistical advancements. The steam engine was widely used to in locomotive trains in the eighteen and nineteen hundreds. With the development of further railroads heading west trains became longer and faster. There are disasters that took place one of the most famous explosions of a steam engine occurred on July 3rd 1927, the engine was Maine Central # 505.

“ July 3, 1927: Maine Central #505 was in Bartlett having come in on the “ Local” Portland, ME to Bartlett, NH job the night before. The Roundhouse was short on power so the 505 was to be a “ helper” locomotive. It was rare for her to be used as a helper as this was the case for all the Class W’s. These were used almost exclusively east of Bartlett, where they really shine.

505 were due to go back to Portland on the afternoon local later that day. She was pressed into service to help with a very “ heavy” extra. She would be put in mid train, and cut off at Crawford’s. Bob Morse and Oscar Clemons planned an afternoon fishing trip for when they returned. There would be 2 locomotives on the head pin.

As the Engineer, Bob Morse worked the engine, to help make up the train; the throttle felt “ Soggy”. He reported it to the mechanics at the Bartlett Roundhouse, they checked the loco over, but could not find the problem. Bob and his fireman, Oscar Clemons, went back to work. Again, Bob reported the

sluggish response of the 505; the shop crews brought her in to the Roundhouse and did everything but dump the fire and pull the boiler jacket off, which Bartlett was not equipped for anyway.

So at about 8: 00 the 505 took her place, on a WESTBOUND extra freight, about mid train. The train departed at about 8: 30 a. m.

Bob Morse was a popular man, but pushed his locos to their operational limits, he got every bit of operational power out of the engine he was running, and he was very good.

One trick almost all engineers had in those days been to run the loco water low. This gave you the maximum amount of steam pressure and the maximum performance from the loco, but the engineer had to have a fireman that could handle the task, it was a dangerous dance, but Oscar Clemons had worked with Bob Morse for years and knew exactly what he was doing.

At about 10: 00 the train passed Willey House Station, Mile post 81 about 1/4 miles up the track it becomes straight and levels off. The 505 was traveling at 40 MPH under past maximum pressure, when the loco reached this point Oscar opened the petcock for water and the engine exploded.

The boiler failed just in front of the drive wheel 2nd from the firebox (3rd driver from the front). The explosion blew Engineer Morse out of the cab and 500 feet back. The Locomotive lifted clean out of the train, fracturing the connecting bar between the engine and tender, flew up in the air 60 feet, turned end for end and dropped upside down and over the bank, crushing

the cab with Oscar Clemons still inside, before rolling back on her side and coming to rest.

Investigators found that the sight glass used to measure the water in the boiler was faulty, the boiler plates failed due to metal fatigue and the soggy feeling Mr. Morse was feeling while working in the yard, were the plates flexing. It blew the face plate of the locomotive off and split the boiler from Stack to bell. The explosion was so loud that it created an “ Acoustic echo”. The explosion was not heard at the Willey Station, but at the Mount Willard Dwelling it was like a clap of thunder.

The trees in the area were all blistered, Mr. Morse’s watch was found in a tree, 20 feet off the ground. The water can that held water and a drinking cup was blown over a mile away.

However, Mr. Morse’s wooden lunch pail was found beside the engine, on a rock. This was a round pail with plates in it, not ONE plate was broken. Mr. Morse survived the explosion and being thrown 500 feet, he was found crawling towards a brook, all he said was, I know I’m done for, go check on Oscar. Oscar Clemons was trapped in the wreck, still alive. Both men made it to the hospital, both died at about the same time, 6 o clock that evening.

Maine Central, not in its finest hour tried to sue Mrs. Morse for the loss of the equipment and damage. However in the court search it was found that 505 had received damage to its boiler, while in service in Baldwin Maine. Although not catastrophic, it did do some damage. It was also found that the 505 had been reported at least 5 times the previous month as having a leaky

boiler, nothing was done. MeCRR dropped the suit, Mrs. Morse counter sued and won.

The youngest surviving son of Oscar Clemons, now in his 80's commissioned a granite memorial to be placed near the site. It was put there several years ago.

From a story penned by Bartlett, NH native Scotty Mallett based on firsthand accounts from families of those involved" (Pitts, 2008).

Sea Based Logistics

The second oldest of all transportation is sea based. Sea based transportation allowed for open trade worldwide. The military uses ships to transport massive cargo as well as troops to foreign countries. The most widely used ships in the world are cargo/ container ships for civilian usage. These ships carry thousands of tonnes of cargo as well as supplies to and from many different countries. As technology progresses, container ships are only going to get larger. One of the most notable sea disasters involved the transportation of one of the most precious cargo ever; crude oil. The following is an excerpt of the events leading up to the spill.

" The Exxon Valdez departed from the Trans-Alaska Pipeline terminal at 9: 12 pm, March 23, 1989. William Murphy, an expert ship's pilot hired to maneuver the 986-foot vessel through the Valdez Narrows, was in control of the wheelhouse. At his side was the captain of the vessel, Joe Hazelwood. Helmsman Harry Claar was steering. After passing through Valdez Narrows, pilot Murphy left the vessel and Captain Hazelwood took over the

wheelhouse. The Exxon Valdez encountered icebergs in the shipping lanes and Captain Hazelwood ordered Claar to take the Exxon Valdez out of the shipping lanes to go around the ice. He then handed over control of the wheelhouse to Third Mate Gregory Cousins with precise instructions to turn back into the shipping lanes when the tanker reached a certain point. At that time, Claar was replaced by Helmsman Robert Kagan. For reasons that remain unclear, Cousins and Kagan failed to make the turn back into the shipping lanes and the ship ran aground on Bligh Reef at 12: 04 a. m., March 24, 1989. Captain Hazelwood was in his quarters at the time.

The National Transportation Safety Board investigated the accident and determined five probable causes of the grounding: (1) The third mate failed to properly maneuver the vessel, possibly due to fatigue and excessive workload; (2) the master failed to provide a proper navigation watch, possibly due to impairment from alcohol; (3) Exxon Shipping Company failed to supervise the master and provide a rested and sufficient crew for the Exxon Valdez; (4) the U. S. Coast Guard failed to provide an effective vessel traffic system; and (5) effective pilot and escort services were lacking" (Cleveland, 2010).

Although there are environmental and human factors threats to the shipping industry a more recent attack has poised the shipping industry on its edge. The threat is that of sea born piracy. Piracy has been a major problem for many years but since the late 1900s piracy has not been a problem until fairly recently since Somalia has a large coast line and many of the cargo vessels are easy targets.

The shipping industry has truly revolutionized the logistics era; now with modern technology the weather can be predicted. Not just weather but under extreme conditions ships can safely navigate to and from harbors. With advanced technology on the ships as well it means less down time to fight corrosion.

Air Based Logistics

Air based logistics is the newest form of transportation. It does take a lot of coordination and planning. Many of the armed forces around the world utilize air transportation to get supplies to their ground forces as well as get their bases up and running. Today there is more than just airborne logistics in play, there are also sattelites that are used to scout drop zones. In stead of dropping in scouting teams it is more efficient to use a satellite or an unmanned aircraft. One of the best examples of air borne logistics is the use of satellites to aid in the relief effort of the 2005 tsuanamis.

“ Satellite images are helping to target relief efforts in regions devastated by the Asian tsunamis of 26 December. The images may also yield clues about the shape and strength of the deadly tidal waves.

The massive earthquake off the Indonesian island of Sumatra spawned massive ocean swells, which have killed an estimated 155, 000 people and left millions more without clean water, food, or shelter.

Relief agencies are using satellite images to find the hardest-hit areas. High-resolution satellites, such as the commercial satellite QuickBird, focus in on

relatively small regions to show details as small as 0. 6 metres across. These dramatic images can be used to discern damage to individual buildings.

But satellites with lower resolution can provide a wider overview. USGS's Landsat 7 satellite, for example, images the entire globe in 180-kilometre swathes every 16 days, at a resolution of 30 metres. It passed over Sumatra's battered northern tip on 29 December, and on Tuesday scientists produced a map showing the areas most affected by the flooding"(McKee, 2005).

How All Of These Tie Into Logistics

Logistics is a two part system of management and dispatch. The usage of these types of transportation has revolutionized the way logistics is dealt with. A product from across the world can be in the home in a matter of days or even a matter of hours if the buyer desires. To conclude if it was not for the different types of technological advancements and the field of transportation human kind would not have developed the means of advanced logistical design and implementation.