



A History of Marine Insurance in the United States

John K. Weber, CPCU
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Presentation Overview

Periods of American general and maritime history.

Some key marine insurance developments in each period.

Reviewing the past for lessons for today and tomorrow.

**Schooner Atlantic breaking the transatlantic sailing record in 1905
Winning the Kaiser's Cup**

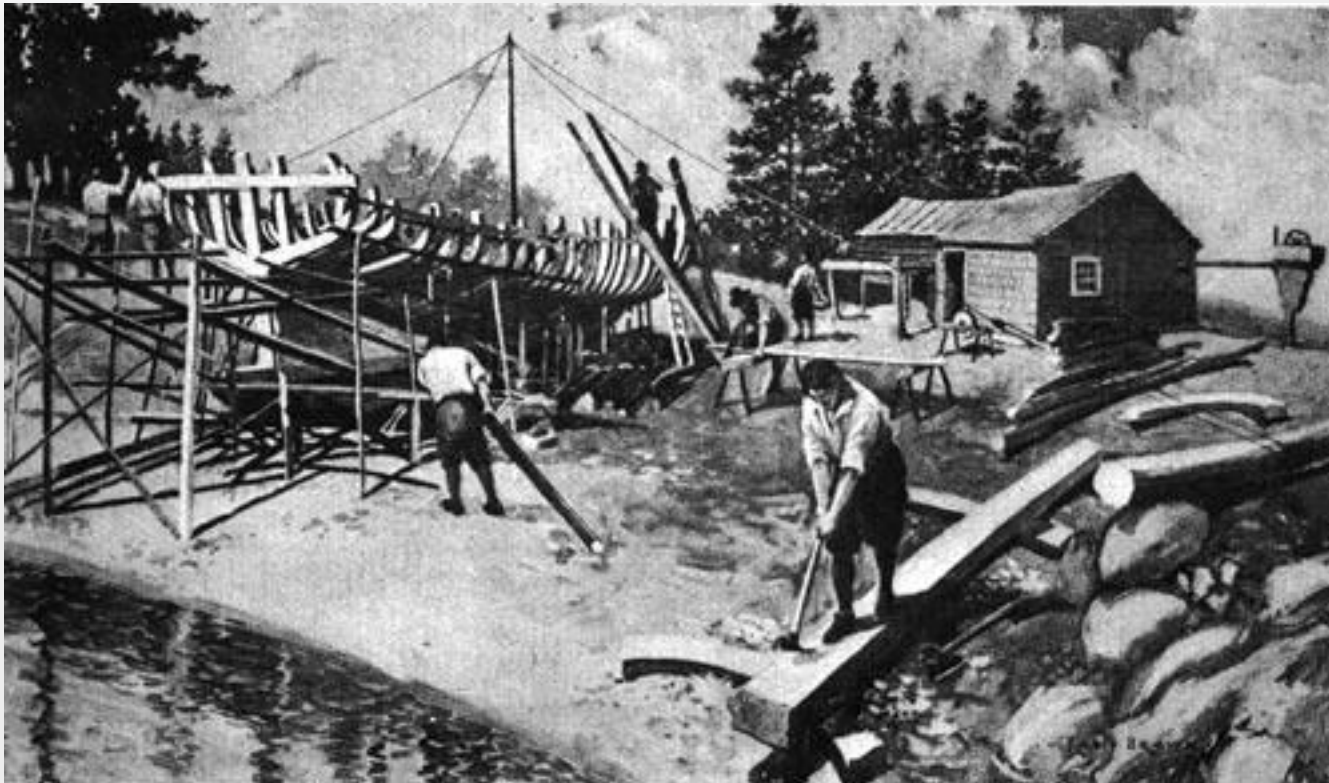
1776-1815 – The Nation's Founding

Challenging Times, Perilous Seas

- 1789 – First Congress, first maritime cabotage bill
- 1794 – Insurance Company of North America – first stock marine insurance company
- 1801 – Barbary pirates wars begin
- 1803 - England's War with France begins
- 1807 – Trade embargo acts
- 1812 - US and Great Britain go to war

A New Maritime Nation

With an abundance of forests and vessel building skills brought from Europe, the United States had a relatively significant maritime industry from its outset.



An Early Marine Insurance Office

The proprietor of a marine insurance office was a broker who placed risks for vessel owners and merchants by arranging for men and women of substance to underwrite. He was often a merchant who had other business interests as well.



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Corporate Underwriting

By 1820 private marine underwriting had virtually disappeared in the US replaced by corporate underwriting with the most companies in New York, Boston, and Philadelphia.



A Young Nation Tries to Avoid War

President Jefferson sought to avoid embroiling America in the European wars by signing trade embargo acts. These had a highly negative impact on the young US economy and trade.



But Ends Up in Conflict

The USS Constitution was undefeated in battle, here taking the frigate HMS Guerriere in 1812.



1815-1860

To a Golden Age of the Merchant Marine

1820 - Board of Underwriters of New York formed

1825 - Erie Canal opened

1842 - Atlantic Mutual Insurance Co. established

1843- Clipper ship era begins

1848- Gold rush to California

1853 – St. Paul Fire & Marine formed

Board of Underwriters of New York

Taking on many of the roles of the subsequent AIMU, the New York Board was originally set up in 1820 as an attempt to establish market rating guidelines. The board also:

- Appointed correspondents
- Established common policy forms
- Surveyed losses
- Vetted ship captains
- Promoted safety at sea

The Atlantic

The Atlantic Mutual was a leading American marine insurer for most of the 19th and 20th Centuries.

President Lincoln Consulted Atlantic on Perils to American Shipping

Shipping Crisis

During the Civil War, John Divine Jones, second president of Atlantic, conferred in Washington with President Lincoln and Secretary Seward about the British privateers which threatened to paralyze the American merchant marine.

Atlantic pledged itself to assume risks freely on American shipping and pay losses promptly in return for Lincoln's assurance that our Government would patrol main commercial seaways, and present claims upon England for losses inflicted upon American ships. \$15,500,000 was awarded our Government by a Board of Arbitration at Geneva, almost entirely

ATLANTIC was already recognized as an authority on American commerce and shipping when in 1861 the opening of the Civil War threatened the country's merchant marine.

Today, an outstanding company in the marine field, Atlantic writes insurance not only on ocean hulls and cargoes but on *practically all other types of property.*

A constantly increasing number of yachtsmen are insuring with this conservatively-managed company which for nearly

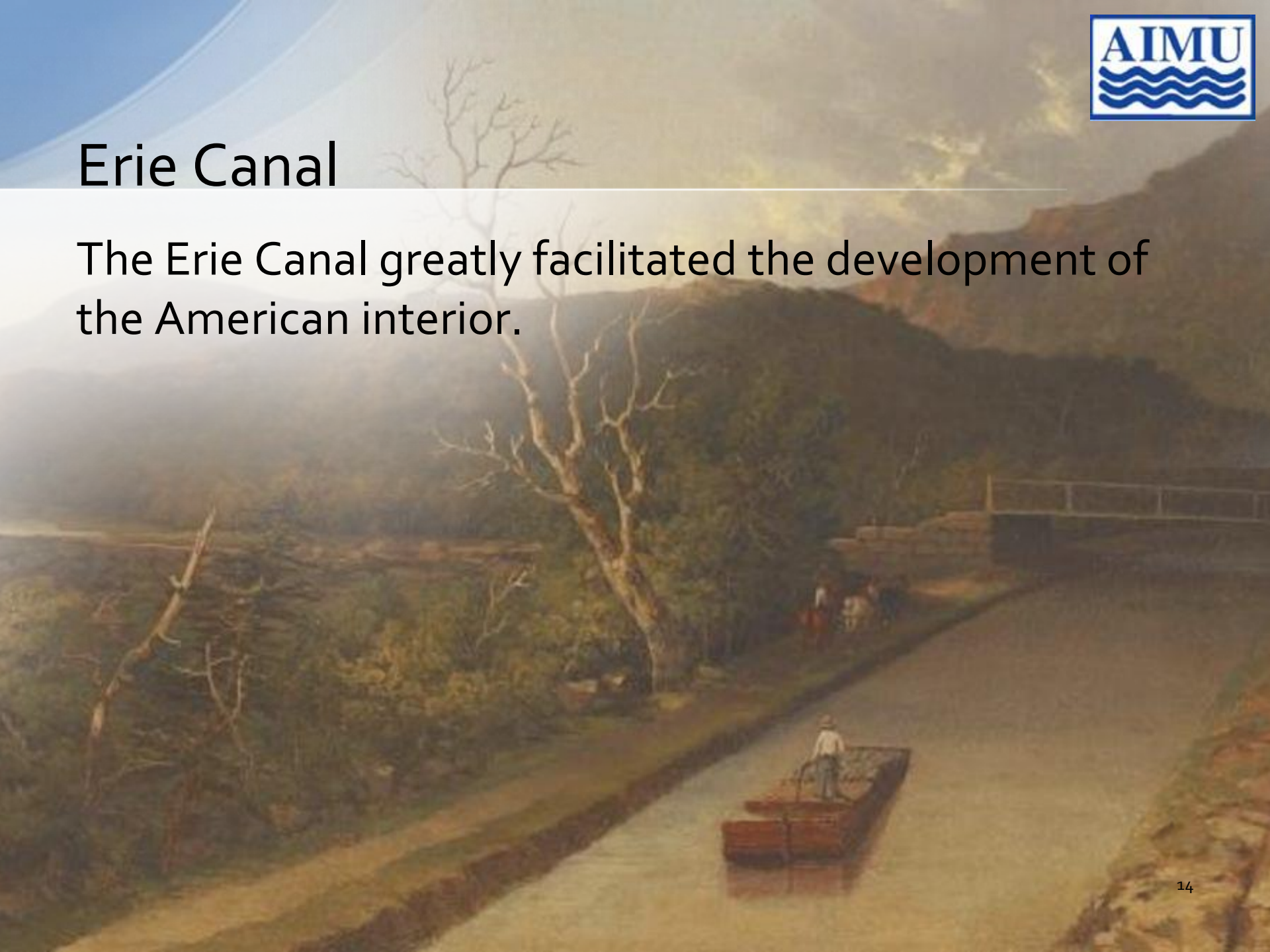
The St. Paul

The St. Paul Fire & Marine was also a force in all areas of American marine underwriting, particularly on the inland waterways.



Erie Canal

The Erie Canal greatly facilitated the development of the American interior.



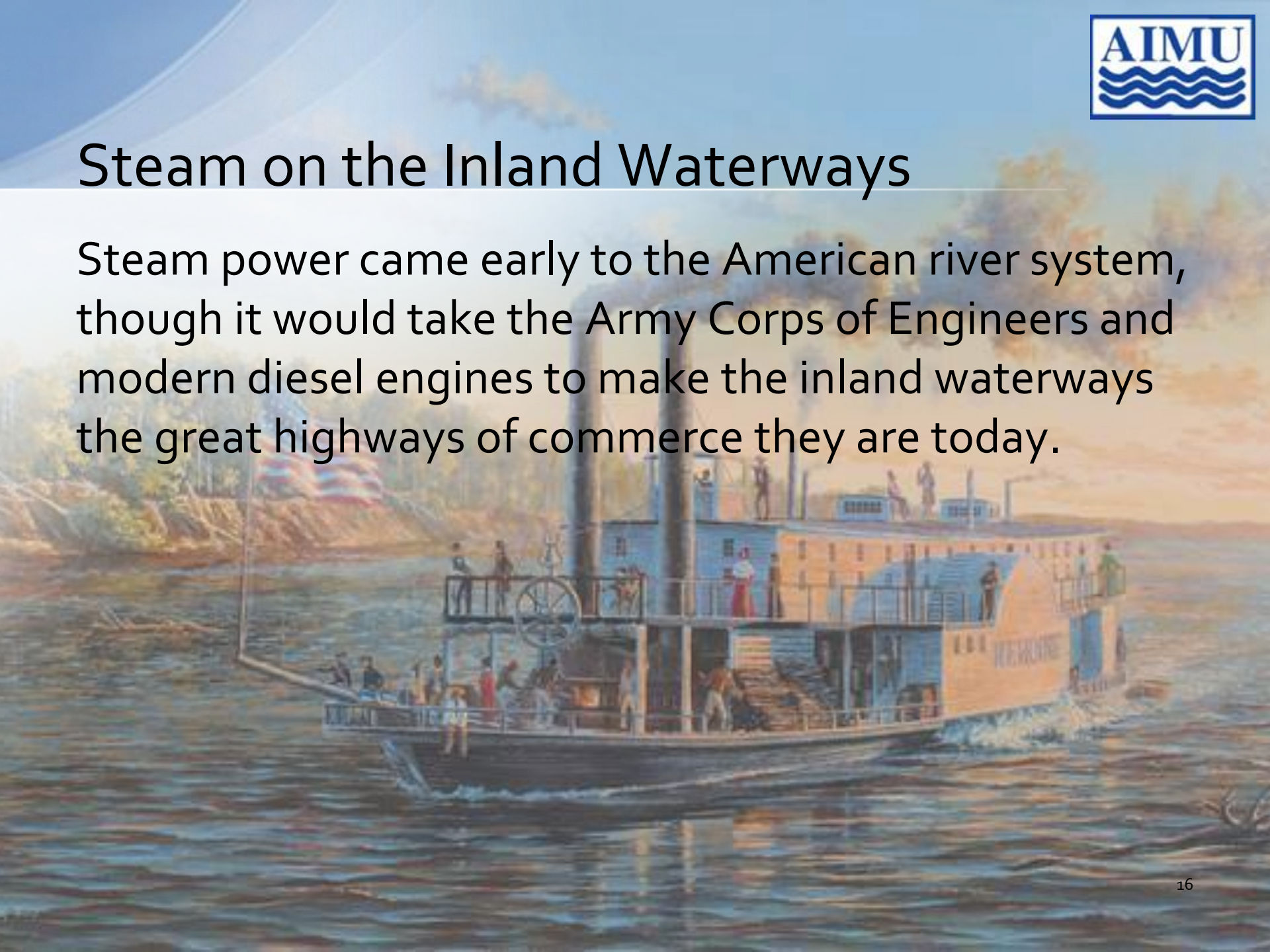
Fuel for the Growing Cities and Factories

Canals were a critical part of the New York area economy bringing anthracite coal from Pennsylvania. John Roebling's 1849 aqueduct on the upper Delaware, carrying barges over the river on the Delaware and Hudson Canal, was one of his early suspension structures and still exists today as a bridge.



Steam on the Inland Waterways

Steam power came early to the American river system, though it would take the Army Corps of Engineers and modern diesel engines to make the inland waterways the great highways of commerce they are today.



Packet Ships

American packet ships competed with European fleets to establish regularly scheduled service across the Atlantic in the early 1800s.



Whaling

American ships led the world in whaling production in the years leading to the Civil War, creating great American fortunes, including those of RH Macy and Hetty Green, America's richest woman at the turn of the 20th Century.



California Gold Rush

The gold rush acted as a great impetus for both maritime and land-based transportation interests.



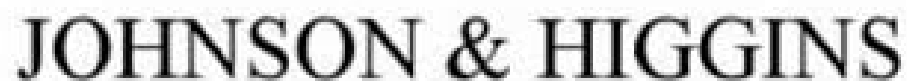
The Clipper

The American clipper ships were the finest vessels of their type in the world in the 1840s – 1850s trading across the globe, but how are they viewed today?



J & H

Established as a marine broker in New York in 1845, Johnson & Higgins always kept a strong marine tradition while rising to become one of the largest “alphabet” brokerages.

The logo for Johnson & Higgins is centered within a white rectangular box. It features the company name "JOHNSON & HIGGINS" in a dark blue, all-caps serif font.

1861-1915 Rise to Global Power

Languishing Ocean Fleet

- 1861- American Civil War begins
- 1862 – American Bureau of Shipping established
- 1863 - Firemen's Fund Insurance Company formed
- 1881 – National Board of Marine Underwriters
- 1882 – Chubb formed
- 1898 – American Institute of Marine Underwriters
- 1898 – Spanish-American War
- 1916 – Panama Canal opened

CSS Alabama – The Alabama Claims

American marine underwriters incurred substantial claims during the Civil War due to losses from Confederate raiders such as the British-built Alabama. Little compensation was subsequently received by insurers in the post-war arbitration with Britain.



American Bureau of Shipping



Originally established in 1862 to vet ship captains, ABS has become a global leader in marine classification.

The Fund

The Firemen's Fund, formed in San Francisco, became a leading underwriter of marine insurance.



Chubb & Son

Established in 1882 in Manhattan's seaport district with \$1,000 each invested by 100 leading merchants, Chubb has been a leading force in marine insurance for its entire existence.



Britannia Rules the Waves

While the Americans directed their efforts elsewhere in the late 1800s, allowing their ocean-going fleet to shrink, the British merchant marine became the world's leading one.



British Iron and Steam

The British fleet rose to preeminence by concentrating on iron hulls and the latest developments in steam propulsion.



Parthia, built for Cunard Lines in Scotland in 1870.

Compound Steam Engine, Screw Propeller

The Great Lakes

The Americans did successfully develop much larger vessels for the Great Lakes. By the 1890s steam and steel began to dominate. Operating In fresh water some of these vessels remained in service for over 100 years.



Steel Laker John W. Gates, built 1900, 400' in length

US Flagged SS Dakota, 1904

While outclassed by some European vessels when launched in 1904, the 622' Dakota was the largest US commercial vessel built to date. The combination passenger/cargo vessel was built by the Great Northern Railway for the Pacific trades.



American Merchant Marine – At the Beginning of the Last Century

The total tonnage of the US merchant fleet was estimated in 1904 to be only one-third of what it was in 1861.

The US fleet carried approximately 75% of the country's own imports and exports between 1840 and 1860, but less than 10% by 1900.

Building a Modern Navy

As the American merchant fleet diminished, by the 1890s the US Navy fleet had 160 vessels, including six battleships and 19 cruisers, defeating the Spanish fleet in the 1898 war.



Battleship USS
Iowa, 1898

1904 - America's Leading Marine Underwriters

American companies wrote a minority of the total domestic US marine business in the early 1900s . Foreign offices of London and European companies insured the majority.

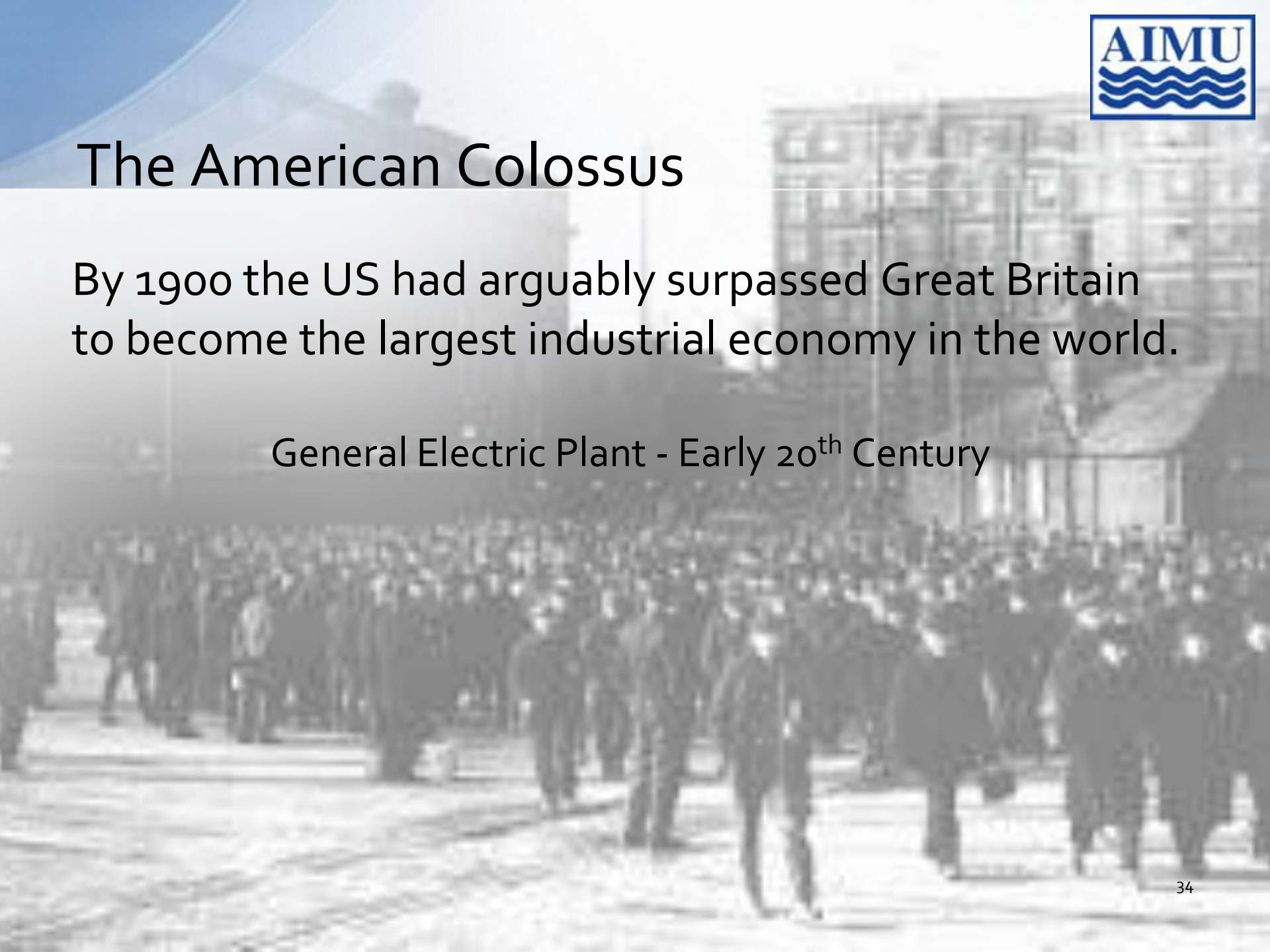
Company	Headquarters	Marine Premiums
Atlantic Mutual	New York	\$3,103,944
Ins. Company of North America	Philadelphia	\$1,819,199
Boston Insurance Company	Boston	\$ 823,563
Federal Insurance Company	Jersey City	\$ 703,149
Firemen's Fund	San Francisco	\$ 534,364
St. Paul Fire & Marine	St. Paul	\$ 423,814
Providence Washington	Providence	\$ 412,027

How many of these entities or their successors still exist?

The American Colossus

By 1900 the US had arguably surpassed Great Britain to become the largest industrial economy in the world.

General Electric Plant - Early 20th Century



Opening of the Panama Canal

The opening of the Panama Canal in 1916 greatly reduced the sailing time between the east and west coasts of the United States and points beyond, facilitating trade and defense.



1915 – 1941

WWI, Events leading to WWII

1914 – Beginning of World War I, American neutrality

1917 – Emergency Fleet Corporation

1917 – Eventual American Entry into WWI

1917 – American P & I Club established

1920 – Merchant Marine (Jones) Act

1920 – American Hull Insurance Syndicate established

1936 – Merchant Marine Act (a second one)

1936- Carriage of Goods by Sea Act (COGSA)

1939 – American Cargo War Risk Exchange

The American P & I Club - 1917

Due to the uncertainties over European clubs arising from the outbreak of WWI, the American Club was established in 1917. It continues to operate as part of the International Group.



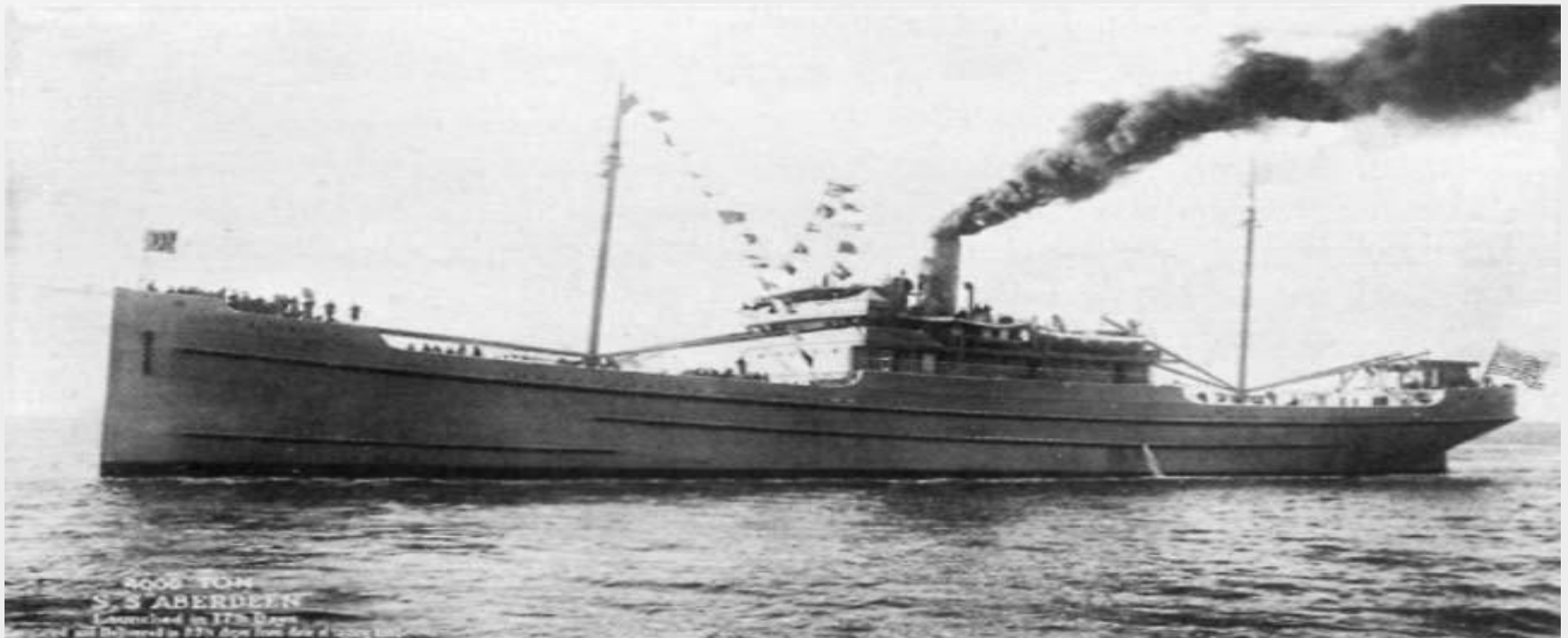
The Emergency Fleet Corporation

The EFC enabled the government in 1917 to ramp up American shipbuilding and requisition most shipyard facilities.



First Arsenal of Democracy

The Emergency Fleet Corporation contracted for over 3,000 vessels beginning in 1917. Even wooden cargo ships were built. These paid off if they completed one laden ocean crossing. After the war most of these hulls were burned for scrap.



The Jones Act – Marine Magna Carta

Preamble to the 1920 act: “It is necessary for the national defense and for the proper growth of foreign and domestic commerce that the United States shall have a merchant marine of the best equipped and most suitable types of vessels sufficient to carry the greatest portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency....”

President Roosevelt, Built in Camden NJ in 1921

Jones Act – Sect. 27 - Cabotage

Any vessel trading between US ports with few exceptions must be US built, US owned, US flagged, and US crewed. This also applies to some US territories such as Puerto Rico.



Matson Lines Lorline built in 1932 for the Mainland -Hawaiian trade

Jones Act – Marine Underwriting

The Jones Act directed the government to periodically study the domestic marine insurance market to ensure that there was adequate capacity. It did not require that this insurance be provided by American underwriters. Section 29 allowed the formation of marine underwriting associations.



Senator Wesley Jones, Washington,
Bill Sponsor

Jones Act – Seamen's Remedies

The 1920 act also established the remedies available to lost or injured seamen based largely on the Federal Employers Liability Act for rail workers.

**The American Merchant Mariner's Memorial
Battery Park, New York City**

American Hull Insurance Syndicate

In order to establish a strong domestic insurance market to compete with London, Section 29 of the Jones Act allowed for the formation of marine “associations”. AHIS was set up to underwrite large commercial hulls. For most of the 20th Century nearly all leading American marine insurers were members of AHIS to conduct blue water insurance.



Domestic Marine Trades

The Jones Act also applies to domestic vessels trading coastwise, in harbors and along lakes and inland waterways. When taking into consideration tugs, barges, fishing boats and other vessel types, the total number of US flagged commercial vessels grew to be the largest fleet in the world.



Improving the Inland Waterways

From its beginnings the US government realized the critical role of transportation by inland waterways. Funding and technology presented secular challenges. After the First World War the Army Corps of Engineers undertook extensive projects to improve the flood control and navigation of the nation's rivers and intracoastal waterways.

1936 Merchant Marine Act

Despite the passage of the Jones Act, the ocean going merchant marine declined markedly from WWI levels by the 1930s. To counter this, while also preparing for a possible new war, FDR signed the 1936 Merchant Marine Act that among other things created subsidies.

The act also established the US Maritime Commission.



COGSA - 1936

As the US enactment of the Hague rules, COGSA governed the responsibilities of carriers and shippers for goods going to and from US ports. This act initially imposed a \$500 limitation per package, or “customary freight unit” for carrier negligence. As variously amended this is still applicable today, but see the Shippers Reform Act (1998).

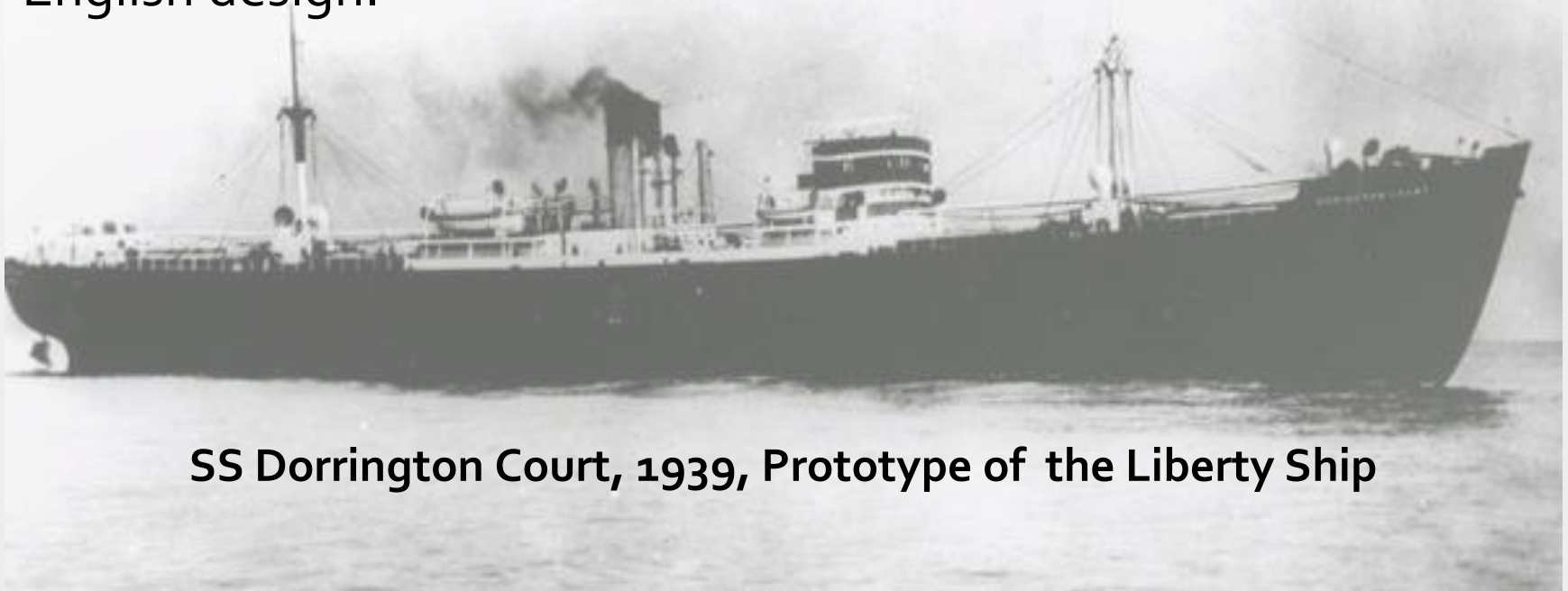


Cargo War Risk Exchange

To prepare for possible war, the American Cargo War Risk Reinsurance Exchange was established in 1939 under the authority granted by Section 29 of the Jones Act. This Cargo facility remained a viable organization until the turn of this century and was part of the American Marine Insurance Clearing House. The Cargo Reinsurance Association (CRA) was also part of the clearing house.

Great Arsenal for Democracy

Under the Lend-Lease Act, the US government agreed before its entry into WWII to provide Great Britain and its allies war materiel, including the first Liberty cargo ships derived from an English design.



SS Dorrington Court, 1939, Prototype of the Liberty Ship

1941-1970

The United States as Global Power

1941- Pearl Harbor

1944 - American Waterways Operators formed

1945 – War's end and beginning of the Nuclear Age

1946 – Merchant Ship Sales Act

1952 – National Cargo Bureau formed

1956 – First McClean container vessel voyage

1957 – St. Lawrence Seaway opens

1959- IMO (United Nations) first meets

1967 – Torrey Canyon oil spill

War Effort – A Massive Merchant Fleet

In addition to phenomenal production efforts for all types of war materiel, the US oversaw the building of over 5,000 merchant vessels during the war ranging from the basic Liberty to the C4.

A Kaiser shipyard in California builds Liberties

1946 Merchant Ship Sales Act

At war's end the US had to decide what to do with its fleet of merchant ships. It kept some in reserve for the military , gave American fleets first dibs at others, and then sold over 1,000 to foreign nations to replenish their war-ravaged fleets in a kind of maritime Marshall plan.



Overage Tonnage

American vessels rushed into production during WWII were used far beyond their intended lives after the war, this on top of the aging of fleets generally . Underwriters formed the **Cargo Reinsurance Association** in 1963 to help cope with overage tonnage

T2 Tanker Pendleton, built 1944, breaks up and sinks in 1952
Suspected metal fatigue

The Coast Guard rescue of the crew was the basis of "The Finest Hours"
A second T2 Tanker Fort Mercer also broke up nearby in the same storm

McCarran-Ferguson

This 1946 Congressional act confirmed that insurance would be regulated principally at the state level. Ocean marine insurance has been exempted in most states from rate and form filing, except for such lines as smaller private pleasure craft. While the financial crisis of 2008 caused some in Congress to suggest more direct federal control of insurers, this has not come to pass.

US Recreational Marine

As the post war economy boomed, the US developed a massive recreational marine industry that included yacht building and marinas. American marine underwriters developed specialty coverages, while also facing the challenges of Cat management.

Containerization

Not the first in the field, but by far the most successful, Malcolm McClean revolutionized the carriage of general cargo beginning with the voyage of the Ideal X from New Jersey to Houston in 1956. The Ideal X was a T2 tanker built in 1944 that still carried a cargo of oil beneath the converted deck containing 58 boxes.

National Cargo Bureau

Formed from predecessor organizations in 1952, the National Cargo Bureau is still the preeminent provider of bulk cargo surveying along with other services such as container inspections. The Bureau works closely with the Coast Guard on safety regulations and inspection protocols.



AWO

Formed at the end of World War II the American Waterways Operators represents the American tug and barge industry. The organization also oversees the **Responsible Carrier Program** safety management system for members.



International Maritime Organization

First meeting in 1959, the UN's IMO has been key in creating critical international maritime conventions. The US is an active participant but is not a signatory to certain agreements for limits on pollution and passenger liability.



Merchant Marine in Support

During the Korean and Vietnam Wars the US flag merchant fleet helped deliver supplies to the war torn countries, such as the States Lines' Aloha State that did service to Vietnam.

SS Aloha State, States Lines, C3 built in 1944.

Offshore Oil

The offshore oil industry developed significantly after WWII in the Gulf of Mexico and off the California coast, creating the need for specialty rigs and service vessels.



Merchant Marine Academies

King's Point and other US merchant marine academy graduates have long been highly influential in marine insurance, rising to positions of leadership in all areas of the industry.



Torrey Canyon, 1967

The massive oil spill resulting from the sinking of the Torrey Canyon off the British coast in 1967 did much to spur legislation and treaty efforts to address marine pollution.

1970-2001

Uncertain Times, Environmental Reckoning

1970 – EPA established

1971 – WQIS formed

1972 – Clean Water Act

1973 – First OPEC Oil Embargo

1980 – Fed funds rate reaches 20%

1982 – Johns Manville bankruptcy

1985 – Casualty crisis - Formation of XL and ACE

1988 – Exxon Valdez spill

1990 – Oil Pollution Act (OPA 90)

1998 – Ocean Shipping Reform Act

WQIS - 1971

To address new environmental legislation and a heightened public awareness of water pollution, all leading members of the marine insurance underwriting community joined together to form the Water Quality Insurance Syndicate in 1971. This syndicate remained the principal US market provider of watercraft pollution insurance for the remainder of the century and continues as a leading pollution underwriter today.

US Fisheries – Magnuson/Stevens Act

To prevent depletion of stocks, the 1976 Fisheries Conservation & Management Act regulated the US industry to a 200 nautical mile offshore limit seeking sustainability and long-term stability.



Cash Flow Underwriting, 1980s Style

Interest rates in the late 1970s/early 1980s soared to 20% spurring cash flow approaches to underwriting. This backfired when Fed Chair Paul Volcker brought rates much lower early in the Reagan years.



CERCLA - 1980

The Comprehensive Environmental Responsibility and Liability Act gave the federal government authority via the EPA to clean up Superfund sites and pursue responsible parties for cost contribution.



Marine Environmental Cleanup

Shipyards and other marine facilities, along with their underwriters, were drawn into environmental site remediation when a facility formed part of a Superfund site, or when a marine operation was identified as a responsible party that contributed waste to a contaminated site.

Asbestos Litigation

Asbestos and related toxic tort litigation grew through the remainder of the 20th Century. Johns Manville, a major asbestos provider, declared insolvency in 1982.



Marine Toxic Tort

Asbestos was used extensively in vessel construction since the 1930s in both military and civilian applications. Both P & I and marine casualty underwriters who were active in the mid-20th Century later became heavily involved with toxic tort litigation for seamen who sailed on ocean going vessels over time, or for workers involved in the vessel building/maintenance process. For a given claimant, the “triple trigger”, or “continuous” theory of liability could potentially involve policies issued over a 50 year period.

Casualty Insurance Crisis – 1980s

A cascade of pollution cleanup, toxic tort claims and general expansion of what was considered legally compensable impacted all large traditional insurance companies in the 1980s resulting in an extremely hard casualty market, especially in certain high-hazard business classes. “Claims made” policies and more restrictive terms became commonly used to address the long-tail nature of the casualty business, including marine exposures.

Here Comes Bermuda - ACE and XL

ACE and XL were the two largest offshore companies formed in response to the casualty crisis of the 1980s. These Bermuda-based insurers provided high limits of excess insurance and helped stabilize the casualty market. A pronounced trend of funding insurers in less traditional ways also began.



Trouble at Lloyds

Asbestos and other long-tail liability claims nearly ruined the Lloyds market in the 1980s. This led to substantial reform of the organization and the creation of Equitas to handle casualty claims runoff. The model going forward was to be corporate underwriting, as opposed to traditional “names”.

Globalization of the Economy

While the late 1900s presented various challenges to marine underwriters, the global economy boomed. From 1960 to 2000, annual US exports went from under **\$50 billion** to **\$1.65 trillion**, while imports over that time period rose from under **\$100 billion** to **\$2.543 trillion**.



Broker Consolidation

The late 1900s saw a spate of broker consolidations with such storied firms as Johnson & Higgins, Alexander & Alexander and Frank B. Hall being merged into larger entities.



1998 Ocean Shipping Reform Act

This watershed federal legislation allowed shippers and carriers to enter into **private contracts** setting out freight terms and limits of liability, no longer necessarily basing liability on established cargo conventions.



Senator Kay Bailey Hutchison, Sponsor

2000-2019

Post 9/11, Terrorism, Economic Challenges

2000 – Y2K

2001 – 9/11

2001 - Invasion of Afghanistan

2002- TRIA

2003 – Iraq War begins

2005 – Hurricane Katrina

2008 – Global financial crisis

2010 – Deepwater Horizon oil spill

2012 – Super Storm Sandy

Y2K Not

Much feared in the lead-up to the new millennium, Y2K turned out thankfully to be for the most part a non-event for insureds and insurers.



9/11

A day that changed all of our lives.



American Troops to the Middle East

Americans led Allied troops in the invasions of Afghanistan and Iraq and remain engaged today throughout the region. The conflicts created the need to insure commercial vessels and materials destined for the region.



Katrina, 2005

The devastating losses incurred in the aftermath of Hurricane Katrina drove home to the insurance industry the potential effects of climate change and the need for the industry to more carefully model its exposure to catastrophic events.



Financial Crisis

The financial crisis of 2008 led to the government bailouts of some large financial institutions, including those in the insurance industry. This created controversy among the general public and also within the insurance community.



Deepwater Horizon Spill, 2010

The horrific BP oil spill in the US Gulf raised environmental concerns to a new level and also called into question the ability of the insurance industry to respond for losses of this magnitude. BP's settlements far exceeded the marine and energy insurance industry's total offered global capacity.



Office of Foreign Asset Control

After 9/11 the onus to make certain no business was done with OFAC excluded countries or Specially Designated Nationals, was put increasingly on insurers and other financial institutions. The need to monitor excluded entities was especially crucial for cargo underwriters and those insuring internationally trading hulls.



US Today - A Vast Marine Market

The US is the world's largest marine market with:

- Nearly 12,000 marinas
- 15.8 million private pleasure craft
- 26,000 dry cargo barges, 3,000 tank barges
- 1,700 river, coastwise and harbor tugboats
- 124 shipyards
- 360 inland and coastal ports
- 79,000 commercial fishing vessels

The Current Marine Market Leaders

2017 AM Best Marine Premiums

COMPANY	2017 GWP
1. American International Group	\$395,204,000
2. Berkshire Hathaway	\$242,751,000
3. Chubb (Including former CIGNA companies)	\$233,748,000
4. Travelers Group	\$230,522,000
5. Starr Group	\$158,423,000
6. Allianz American Co.'s	\$157,442,000
7. Navigators Insurance Group (now part of Hartford)	\$124,523,000
8. IMU One Beacon (now part of Intact Financial)	\$120,719,000
9. Tokio Marine US	\$119,201,000
10. XL Catlin Group (now part of AXA)	\$116,696,000

When did each company get its start?

Looking Aft, Looking Forward

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Secular Soft Market Challenges

History clearly shows that there were very few hard markets over time in marine insurance. Insurers that survived, while aided by good fortune, did so primarily through disciplined underwriting and other prudent business practices, and almost always with the marine practice as part of a broader insurance company. Even successful marine practices were often subsumed in mergers and acquisitions.

Special Relationship

For most of its history the US marine insurance market has had a special relationship with Lloyds and other London market facilities, including clubs and reinsurers. This has been natural given a common language, basis of law, and the position of London in the global marine insurance market. Whether this continues in the future to this extent will depend upon a number of factors.

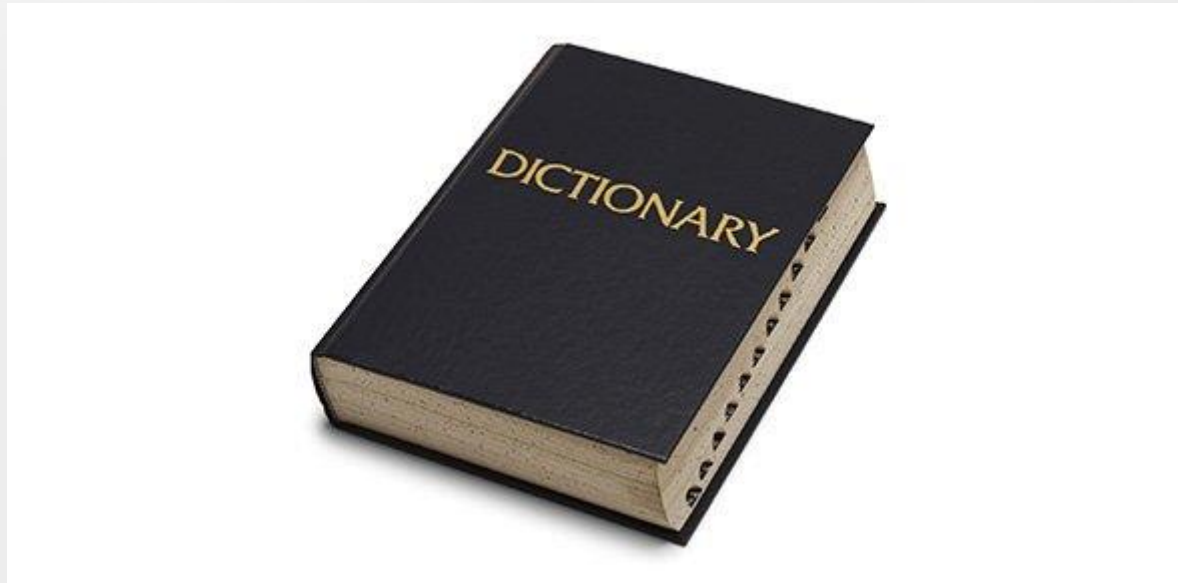


The Ocean Going Merchant Marine

Today, as for most of the country's history, the size of the US blue water fleet is not commensurate with the country's power and global goals. Only 82 US flagged vessels are now engaged in international trade carrying a minimal amount of the world's cargoes. Will something have to give in the Jones Act for American flagged blue water vessels to continue to operate?

The Marine Definition

As insurance continues to evolve, what the industry will treat as marine on a standalone basis and what aspects of marine will merge into broader disciplines remains to be seen.



The Jones Act

The Jones Act will in all likelihood not substantively change for the domestic trades. This ensures the viability of the American commercial fleet.



Start Ups and M & A

Throughout the history of marine insurance in the US there have been frequent mergers, acquisitions, start-ups and runoffs, both on the brokerage and company side. What has changed is the pace, size, methods of funding, and complexity of these activities. These will continue in all areas of insurance



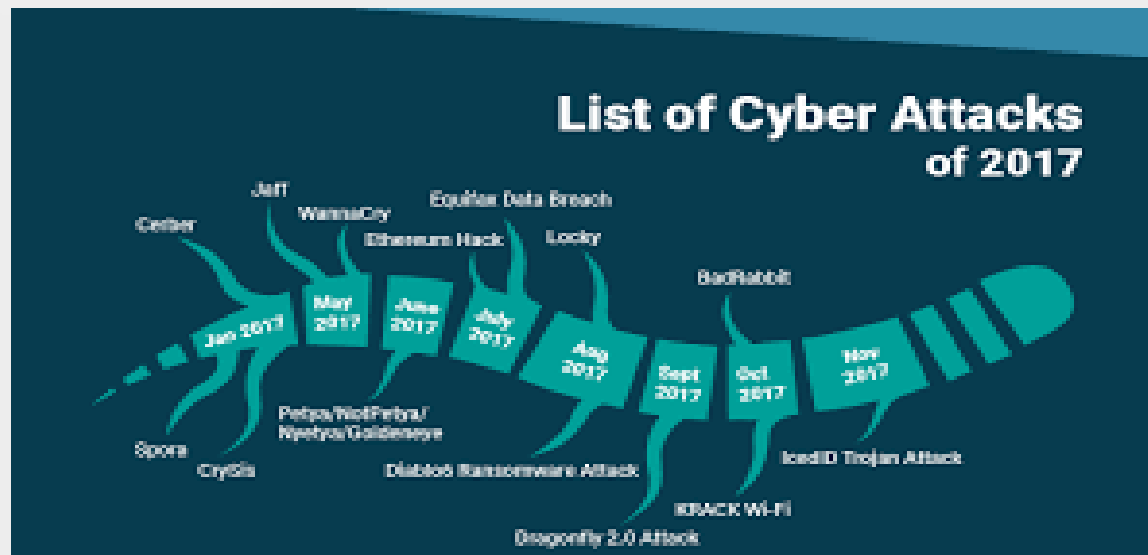
Travelers made a number of acquisitions in the 2000s that resulted in combining parts of marine books formerly of the St. Paul, Atlantic Mutual and RSA USA.

What Will the Next Asbestos(es) Be?

One Recent Example: Baby Powder.
Talc is now alleged to cause chronic illness in some.

Hostile Acts Insurance

Which hostile acts are and are not considered insurable in the physical and cyber space will continue to be debated and defined, with solutions offered on a public or private basis. Marine insurers facing war, seizure and piracy have traditionally faced these challenges.



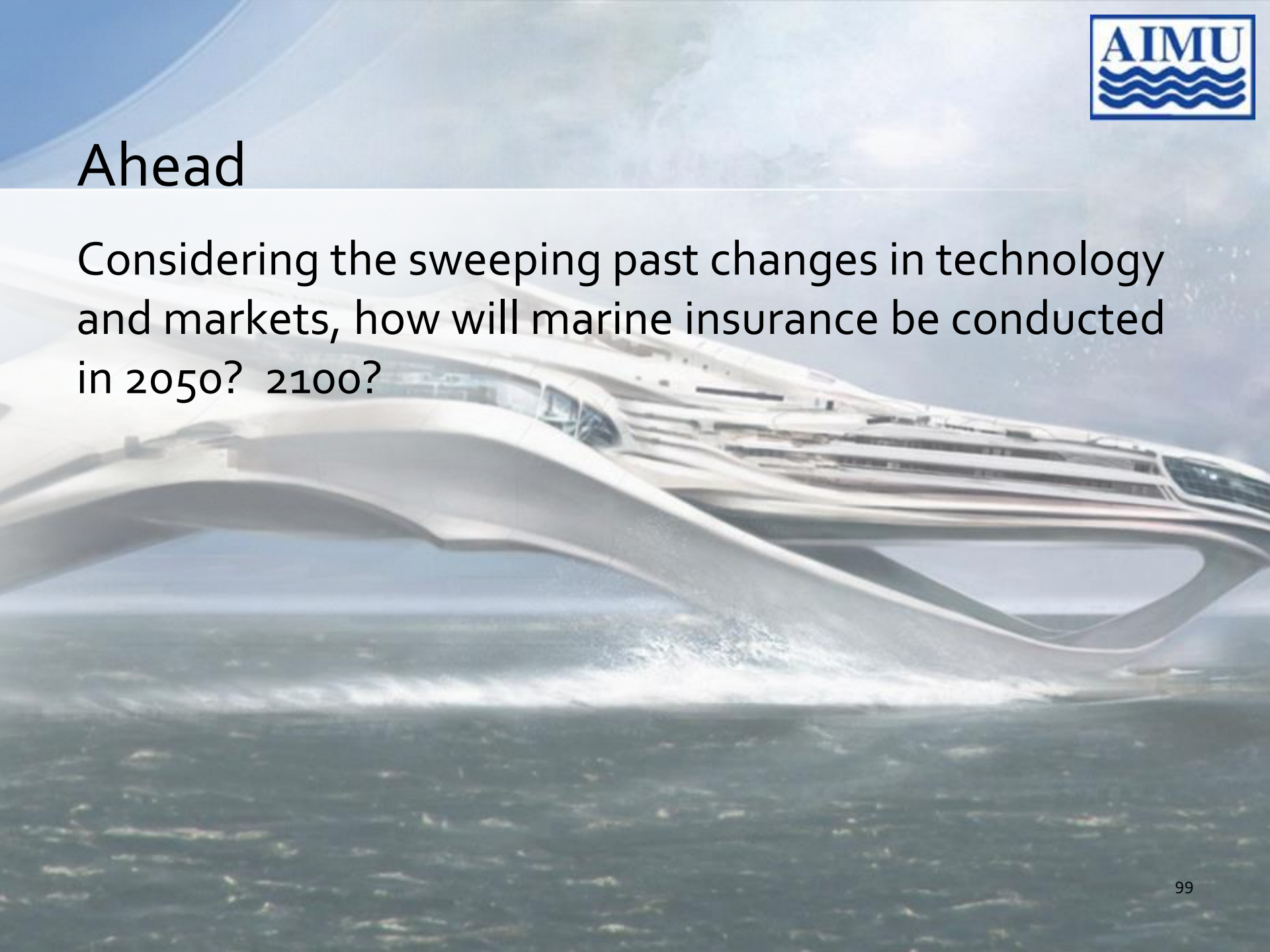
Cat Management

If climate change leads to greater catastrophic weather related events, the management of marine risk accumulation in the US, with the country's extensive exposure to cyclonic phenomena, must continue to be critical and ever more sophisticated.



Ahead

Considering the sweeping past changes in technology and markets, how will marine insurance be conducted in 2050? 2100?



Questions, Discussion



Experiencing American Maritime History

The Council of American Maritime Museums count most of the US marine museums as members. These display the rich variety of our marine heritage.

