

Carriers Compliance in Freight Transportation and Logistics

Chapter 40

By David Jacoby

©2008 Boston Strategies International

445 Washington Street • Wellesley, MA 02482 • USA

Phone: (1) (781) 250-8150 • Fax: (1) (781) 465-6069 • E-mail: info@bostonstrategies.com

CONTENTS

1	Introduction.....	2
2	Key Regulatory Bodies.....	2
3	Compliance Issues for Trucking Companies	3
3.1	Hours of Service	3
3.2	Vehicle Size and Weight Limits	4
3.3	Advance Manifest Notification for Imports.....	4
3.4	Credentialing of Hazardous Materials Drivers.....	4
3.5	Safety Review for New Carriers	5
3.6	Other FMCSA Regulations.....	5
4	Compliance Issues for Railroads	6
4.1	Security Compliance	7
4.2	Rail Safety and Accident Reporting.....	7
4.3	Noise Limits	7
4.4	Freight Trains Operating on Passenger Lines.....	7
4.5	Other Title 49 Regulations.....	7
5	Compliance Issues for Marine Transportation Companies	10
5.1	Cabotage	11
5.2	Cargo Preference.....	11
5.3	Cargo Security and Inspection Rules.....	12
5.4	Other Regulations Affecting Marine Cargo.....	12
6	Compliance Issues for Air Cargo Carriers.....	12
6.1	Mandated Security Measures	13
6.2	Limits on Foreign Ownership	13
6.3	Maintenance Records Management	14
6.4	Other Regulations Affecting Air Cargo.....	14
7	Conclusion	14

FIGURES

Figure 1: US Government Agencies Affecting Cargo Carrier Compliance	3
Figure 2: 23 CFR Regulations Affecting Motor Carriers	6
Figure 3: Title 49 Regulations Affecting Railroads, Administered by the FRA	8
Figure 4: Title 49 Regulations Affecting Railroads, Administered by the STB	9

1 INTRODUCTION

Rules and regulations in the transportation and logistics field may be grouped into two categories: 1) regulation that affects carriers (transportation and logistics companies providing freight movement services), and 2) regulation that affects shippers (companies that hire others to move freight). The government imposes many regulations on carriers that shippers may not be aware of. Conversely many shippers are unaware of the regulations imposed on the carriers that they hire.

Accordingly, this chapter highlights significant regulations faced by carriers, and a separate one focuses on regulations affecting shippers – companies hiring other companies to move freight. Both provide an overview of the bodies of law affecting each group so both shippers and carriers may have an appreciation for the regulatory environment affecting each other, as well as a familiarity with the most common laws that could affect their business.

Carriers need to understand and comply with a range of laws that has developed over many years and is in some cases quite complex. The requirements vary substantially by mode. Therefore, the chapter is structured by type of transport: truck, rail, water, and air.

This chapter focuses on freight, not passenger, transport, and uses the United States (US) as a reference point for defining compliance issues. Because of the legislative nature of compliance issues, the institutional and regulatory framework is different outside of the US.

2 KEY REGULATORY BODIES

In the United States, the Department of Transportation (DOT) exercise authority over freight carriers through the following agencies¹, which are shown in Figure 1.

- Trucking companies: The Federal Motor Carrier Safety Administration (FMCSA), which sets truck size and weight limits and Hours of Service rules, among others.

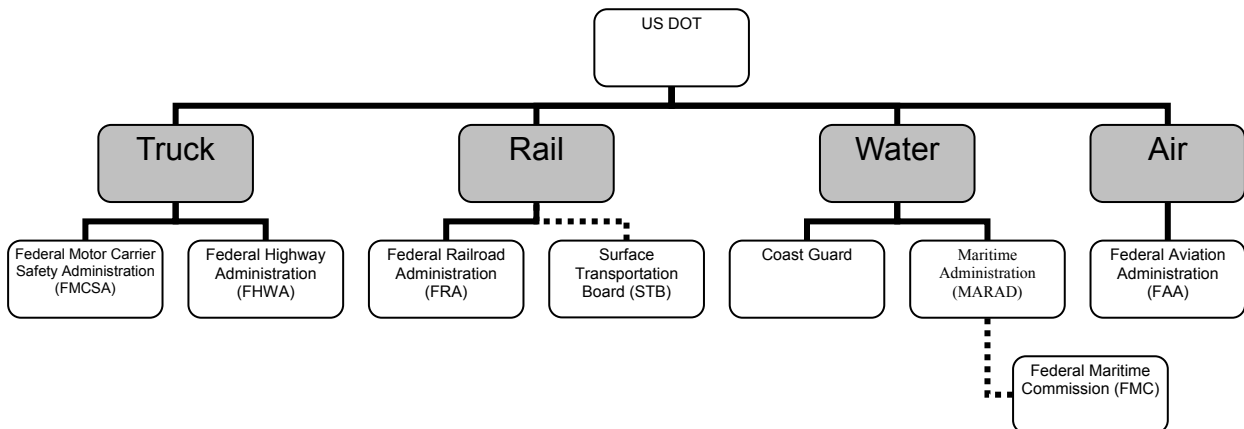
¹ Several agencies within DOT administer compliance of State DOTs to federal standards; however these agencies place few or no regulations on freight carriers or shippers. These agencies include:

- The National Highway Traffic Safety Administration (NHTSA), which aims to “save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards, and enforcement.”
- The Federal Transit Administration, which oversees most aspects of the nation’s mass transit systems, is outside of the scope of this chapter since it deals with passenger transportation.
- The Transportation Security Administration (TSA), which administers the sky marshal program that was reinstated after 9/11/2001.

Also, the Federal Highway Administration (FHWA) certifies the safety of new trucking companies.

- **Railroads:** The Federal Railroad Administration (FRA), which administers rail safety and rail assistance programs and research efforts. Also, the Surface Transportation Board (STB) resolves railroad rate and service disputes and reviews proposed railroad mergers. The STB is organizationally independent of the DOT, as indicated by the dashed line in Figure 1.
- **Marine Transportation Providers:** The Maritime Administration (MARAD) administers the cargo preference rules, and the Federal Maritime Commission (FMC) administers laws designed to protect US interests in the ownership of waterborne carriage and terminal operation. The Coast Guard serves ports and inland waterways, and has the right to inspect cargos.
- **Air Cargo Carriers:** Federal Aviation Administration, which oversees the air traffic control system and intervenes to prevent aviation-related environmental side effects, and mandates airworthiness certification of new aircraft.

Figure 1: US Government Agencies Affecting Cargo Carrier Compliance



Source: Boston Logistics Group

3 COMPLIANCE ISSUES FOR TRUCKING COMPANIES

The Motor Carrier Act of 1980 deregulated the trucking industry. In 1995, the Interstate Commerce Commission (ICC) was terminated and some of its responsibilities transferred to the Surface Transportation Board (STB). This move effectively institutionalized the 25-year trend toward deregulation. That being said, several important regulations affect trucking companies today.

3.1 Hours of Service

Hours of service (HOS) regulation took effect in 2004. The regulation limits the number of hours that drivers can work in one stretch. Truckers may not drive after being on-duty for 60 consecutive hours in a 7 day period or 70 hours in an eight day period. A “weekend” off (34 consecutive hours) is required to restart the on-duty cycle. Long haul

drivers can drive for 11 hours after 10 consecutive hours off-duty. Drivers using the sleeper berth provision must take at least 8 consecutive hours in the sleeper berth, plus 2 consecutive hours either in the sleeper berth, off duty, or any combination of the two, and may not drive beyond the 14th hour after coming on duty, following 10 consecutive hours off duty.

3.2 Vehicle Size and Weight Limits

23 CFR Part 658 defines allowable truck size and weight limits. Size and weight restrictions vary by state and city. In addition, federal and state governments have defined numerous provisions for special vehicles. The itemization of prohibited conditions is lengthy, but the following list of generally allowable conditions may be helpful:²

- Length. Trailers between 28 and 48 feet long, and buses up to 45 feet long are allowed. In addition, non-conforming vehicles that were in lawful operation before 1982 are allowed if they have filed for exemption.
- Width. Vehicles under 102 inches wide are generally allowed (Hawaii allows 108-inch wide vehicles). With state permits, manufactured houses that exceed 102 inches and vehicles with safety and/or non-cargo carrying appurtenances extending beyond 3 inches from the side of the vehicle are allowed.
- Weight. Vehicles are limited to:
 - Gross vehicle weight less than 80,000 pounds (except where lower gross vehicle weight is dictated by the bridge formula³)
 - 20,000 pounds per single axle
 - 34,000 pounds per tandem axle combination
 - Tire loads of less than 500 pounds per inch of tire or tread width on non-steering axles

3.3 Advance Manifest Notification for Imports

Trucks entering the US from Canada or Mexico must have US Customs data processed a minimum of one hour before the shipment arrives at the border, as stipulated by CBP in their Final Rule on the Trade Act of 2002.⁴

3.4 Credentialing of Hazardous Materials Drivers

Section 1012 of the Patriot Act⁵ requires drivers of vehicles transporting hazardous materials to gain State approval that the individual does not constitute a security threat.

² Refer to FHWA's Comprehensive Truck Size and Weight Study Executive Summary, October 2000.

³ $Weight = 500 * (Length \text{ in Feet Between Axles} * Number \text{ of Axles} / (Number \text{ of Axles} - 1) + 12 * (Number \text{ of Axles}) + 36)$

⁴ The Final Rule was issued on April 22, 2005.

3.5 Safety Review for New Carriers

According to Title 49, “The Secretary shall require, by regulation, each owner and each operator granted new operating authority, after the date on which section 31148(b) is first implemented, to undergo a safety review within the first 18 months after the owner or operator, as the case may be, begins operations under such authority.”

3.6 Other FMCSA Regulations

In addition the above regulations, the Federal Motor Carrier Safety Administration (FMCSA) maintains enforcement power over a variety of other laws, embodied in the 23 CFR and shown in Figure 2:

⁵ The Act is formally called the “Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism” Act, hence the acronym “PATRIOT”

Figure 2: 23 CFR Regulations Affecting Motor Carriers

Part 40 – Drug and Alcohol Regulations
Part 325 – Compliance with Interstate Motor Carrier Noise Emission Standards
Part 350 – Commercial Motor Carrier Safety Assistance Program
Part 355 – Compatibility of State Laws and Regulations Affecting Interstate Motor Carrier Operations
Part 356 – Interpretations and Routing Regulations
Part 360 – Fees for Motor Carrier Registration and Insurance
Part 365 – Rules Governing Applications for Operating Authority
Part 366 – Designation of Process Agents by Motor Carriers and Brokers
Part 367 – Standards for Registration with States
Part 368 – Applications for Certificates of Registration by Foreign Motor Carriers and Foreign Motor Private Carriers
Part 370 – Principles and Practices for the Investigation and Voluntary Disposition of Loss and Damage Claims and Processing Salvage
Part 371 – Brokers of Property
Part 372 – Exemptions, Commercial Zones, and Terminal Areas
Part 373 – Receipts and Bills
Part 374 – Passenger Carrier Regulations
Part 375 – Transportation of Household Goods in Interstate Commerce; Consumer Protection Regulations
Part 376 – Lease and Interchange of Vehicles
Part 377 – Payment of Transportation Charges
Part 378 – Procedures Governing the Processing, Investigation, and Disposition of Over-Charge, Duplicate Payment, or Over collection Claims
Part 379 – Preservation of Records
Part 380 – Special Training Requirements
Part 381 – Waivers, Exemptions, And Pilot Programs
Part 382 – Controlled Substances and Alcohol Use and Testing
Part 383 – Commercial Driver’s License Standards; Requirements and Standards
Part 384 – State Compliance with Commercial Driver’s License Program
Part 385 – Safety Fitness Procedures
Part 386 – Rules of Practice for Motor Carrier, Broker, Freight Forwarder, and Hazardous Materials Proceedings
Part 387 – Minimum Levels of Financial Responsibility for Motor Carriers
Part 388 – Cooperative Agreements with States
Part 389 – Rulemaking Procedures – Federal Motor Carrier Safety Regulations
Part 390 – General
Part 391 – Qualifications of Drivers and Longer Combination Vehicle (LCV) Driver Instructors
Part 392 – Driving of Motor Vehicles
Part 393 – Parts and Accessories Necessary for Safe Operation
Part 395 – Hours of Service of Drivers
Part 396 – Inspection, Repair, and Maintenance
Part 397 – Transportation of Hazardous Materials; Driving and Parking Rules
Part 398 – Transportation of Migrant Workers
Part 399 – Employee Safety and Health Standards
Part 571 – Federal Motor Vehicle Safety Standards

Source: Federal Motor Carrier Safety Administration (FMCSA)

4 COMPLIANCE ISSUES FOR RAILROADS

The most significant government act affecting the rail industry in the last 50 years was the Staggers Act of 1980. The combination of the Staggers Act, which ended the regulation of common carrier tariffs, and the Motor Carrier Act, which deregulated

trucking, resulted in a shift of traffic from railroads to trucking companies. Though there have been some moves to re-regulate the rail industry,⁶ often driven by captive shipper situations, carrier compliance issues are much reduced compared to previous years. The rest of this section summarizes some of the more notable compliance issue for rail carriers today.

4.1 Security Compliance

Section 102 of the Rail Safety Reauthorization Bill S. 1402 (2003) requires railroads to comply with DOT security programs.

4.2 Rail Safety and Accident Reporting

Section 101 of The Rail Safety Reauthorization Bill S. 1402 (2003) requires railroads and states to provide DOT with safety statistics.

The Rail Safety Reauthorization Bill S. 1402 (2003) also includes a provision that “require the Federal Railroad Administration’s (FRA) Railroad Safety Advisory Committee to develop, and report to Congress, consensus recommendations on changes needed to address fatigue management for covered service employees.” These changes would apply to the railroads once finalized.

49 CFR Part 225 requires carriers to notify the FRA of accidents and incidents, file a monthly accident report, and have an internal control plan containing eleven specified components that describes how the railroad achieves compliance with the regulation (§ 225.33).

4.3 Noise Limits

Section 103 of the Rail Safety Reauthorization Bill sets rail noise limits.

4.4 Freight Trains Operating on Passenger Lines

The Federal Railroad Administration (FRA) imposes safety regulations related to freight trains running on passenger lines, and vice versa. For example, high-speed passenger trains operating on a freight line must be able to withstand one million pounds of force without deformation..

4.5 Other Title 49 Regulations

Title 49 includes a variety of other provisions related to railroad safety that would relevant to those needing comprehensive information on this topic. Its contents include the numbered sections listed in Figure 3 and Figure 4.

⁶ For example, Railroad Antitrust and Competition Acts HB 3318 and HB 2047

Figure 3: Title 49 Regulations Affecting Railroads, Administered by the FRA

- 200 Informal rules of practice for passenger service
- 201 Formal rules of practice for passenger service
- 207 Railroad police officers
- 209 Railroad safety enforcement procedures
- 210 Railroad noise emission compliance regulations
- 211 Rules of practice
- 212 State safety participation regulations
- 213 Track safety standards
- 214 Railroad workplace safety
- 215 Railroad freight car safety standards
- 216 Special notice and emergency order procedures: Railroad track, locomotive and equipment
- 217 Railroad operating rules
- 218 Railroad operating practices
- 219 Control of alcohol and drug use
- 220 Railroad communications
- 221 Rear end marking device--passenger, commuter and freight trains
- 222 Use of locomotive horns at public highway-rail grade crossings
- 223 Safety glazing standards--locomotives, passenger cars and cabooses
- 225 Railroad accidents/incidents: Reports classification, and investigations
- 228 Hours of service of railroad employees
- 229 Railroad locomotive safety standards
- 230 Steam locomotive inspection and maintenance standards
- 231 Railroad safety appliance standards
- 232 Brake system safety standards for freight and other non-passenger trains and equipment; end-of-train devices
- 233 Signal systems reporting requirements
- 234 Grade crossing signal system safety
- 235 Instructions governing applications for approval of a discontinuance or material modification of a signal system or relief from the requirements of part 236
- 236 Rules, standards, and instructions governing the installation, inspection, maintenance, and repair of signal and train control systems, devices, and appliances
- 238 Passenger equipment safety standards
- 239 Passenger train emergency preparedness
- 240 Qualification and certification of locomotive engineers
- 241 United States locational requirement for dispatching of United States rail operations
- 244 Regulations on safety integration plans governing railroad consolidations, mergers, and acquisitions of control
- 245 Railroad user fees
- 250 Guarantee of certificates of trustees of railroads in reorganization
- 256 Financial assistance for railroad passenger terminals
- 260 Regulations governing loans and loan guarantees under the railroad rehabilitation and improvement financing program
- 261 Credit assistance for surface transportation projects
- 265 Nondiscrimination in federally assisted railroad programs
- 266 Assistance to States for local rail service under section 5 of the Department of Transportation Act
- 268 Magnetic levitation transportation technology deployment program

Source: Code of Federal Regulations, National Archives and Records Administration

Figure 4: Title 49 Regulations Affecting Railroads, Administered by the STB

[1001](#) Inspection of records
[1002](#) Fees
[1003](#) Forms
[1004](#) Interpretations and routing regulations
[1005](#) Principles and practices for the investigation and voluntary disposition of loss and damage claims
[1007](#) Records containing information about individuals
[1011](#) Board organization; delegations of authority
[1013](#) Guidelines for the proper use of voting trusts
[1014](#) Enforcement of nondiscrimination on the basis of handicap in programs or activities conducted by the STB
[1016](#) Special procedures governing the recovery of expenses by parties to Board adjudicatory proceedings
[1018](#) Debt collection
[1019](#) Regulations governing conduct of Surface Transportation Board employees
[1021](#) Administrative collection of enforcement claims
[1033](#) Car service
[1034](#) Routing of traffic
[1035](#) Bills of lading
[1037](#) Bulk grain and grain products--loss and damage claims
[1090](#) Practices of carriers involved in the intermodal movement of containerized freight
[1104](#) Filing with the board--copies--verification--service--pleadings, generally
[1105](#) Procedures for implementation of Environmental Laws
[1106](#) Procedures for safety integration plans involving railroad consolidations, mergers, and acquisitions of control
[1120](#) Use of 1977-1978 study of motor carrier platform handling factors
[1132](#) Protests requesting suspension and investigation of collective ratemaking actions
[1133](#) Recovery of damages
[1135](#) Railroad cost recovery procedures
[1139](#) Procedures in motor carrier revenue proceedings
[1141](#) Procedures to calculate interest rates
[1144](#) Intramodal rail competition
[1146](#) Expedited Relief for Service Emergencies
[1147](#) Temporary relief under 49 U.S.C. 10705 and 11102 for Service Inadequacies
[1150](#) Certificate to construct, acquire, or operate railroad lines
[1151](#) Feeder railroad development program
[1152](#) Abandonment and discontinuance of rail lines and rail transportation under 49 U.S.C. 10903
[1180](#) Railroad acquisition, control, merger, consolidation project, trackage rights, and lease procedures
[1182](#) Purchase, merger, and control of motor passenger carriers
[1184](#) Motor carrier pooling operations
[1242](#) Separation of common operating expenses between freight service and passenger service for railroads
[1243](#) Quarterly operating reports--railroads
[1244](#) Waybill analysis of transportation of property--railroads
[1245](#) Classification of railroad employees; reports of service and compensation
[1247](#) Report of cars loaded and cars terminated
[1248](#) Freight commodity statistics
[1253](#) Rate-making organization; records and reports
[1280](#) Handling of national security information and classified material
[1300](#) Disclosure, publication, and notice of change of rates and other service terms for rail common carriage
[1305](#) Disclosure and notice of change of rates and other service terms for pipeline common carriage
[1310](#) Tariff requirements for household goods carriers
[1313](#) Railroad contracts for the transportation of agricultural products
1332: Filing contracts for surface mail transportation

5 COMPLIANCE ISSUES FOR MARINE TRANSPORTATION COMPANIES

The level of regulation in today's marine shipping industry is light compared to historical levels.

Since 1928, the US government has offered subsidies and incentives to try to assure stability and continuity for the maritime industry, and to ensure that the merchant fleet could be deployed to support wartime operations if necessary.

- The Merchant Marine Act of 1928 encouraged U.S. shipbuilding and the 1936 Merchant Marine Act established the Merchant Marine Academy. The Merchant Marine Act of 1970, signed by President Reagan, called for the construction of 300 merchant ships, and provided for substantial tax breaks for those companies investing in new shipping, presumably suggested by the bill and subsidized by the 1936 Moratorium on new applications in 1981.
- Construction differential subsidies motivated US-flag carriers to invest in shipbuilding, while operating-differential subsidies offset the subsidies received by many foreign-flag carriers.

Despite the incentives, however, the US ocean shipping industry became uncompetitive⁷ and the industry was eventually largely deregulated.⁸ As the true cost of US shipbuilding and crewing became apparent, many shipping companies were sold to foreign entities⁹ or migrated to tax havens such as Panama, Liberia, Costa Rica, Hong Kong, and Gibraltar. Panama offers no income tax on earnings outside of Panama, no share issuance time limits, and no annual filing requirements for tax returns or financial statements.

⁷ For a reference on cost differentials, see the Maritime Cabotage Task Force's Post Hearing Brief on the Economic Effects of significant U.S. Import Restraints, 1995.

⁸ The last operating differential subsidy expired in 2001 and the Ocean Shipping Reform Act of 1998 (OSRA), also called the Shipping Act of 1998, allowed confidential service contracts between shippers and ocean common carriers. OSRA concealed from public view most details of the contracts except the origin and destination port ranges, the commodities involved, the minimum volumes, and the duration of contracts.

Confidential contracts with shippers decreased the influence of Conferences, trade-based shipping cartels that had previously fixed the terms of engagement with shippers.

⁹ American President Companies merged with Neptune Orient Lines LTD, a Singapore-owned and operated line 1997, and SeaLand bought by Maersk in 1999.

Today, compliance in the ocean shipping centers around cabotage, cargo preference, and the 24-Hour Manifest rule.

5.1 Cabotage

The Jones Act of 1920, also called the Merchant Marine Act, restricted coastwise trade to US-flag vessel and mandated that American-flag vessels be constructed in the US and owned by US nationals. The Act is still in effect today.

5.2 Cargo Preference

Since 1904, government legislation has favored US-flag vessels for shipment of government-impelled cargo. The following text, adapted from MARAD, outlines the cargo preference laws:

- “The Cargo Preference Act of 1904 (1904 Act) requires all items procured for or owned by U.S. military departments and defense agencies be carried exclusively (100 percent) on U.S.-flag vessels available at rates that are not excessive or otherwise unreasonable. These cargoes are generated primarily by Department of Defense (DOD) contracts with domestic and foreign contractors. Cargo preference applies not only to the end product but also to component parts.
- The Cargo Preference Act of 1954 (P.L. 83-664), as amended, requires that at least 50 percent of the gross tonnage of all Government-generated cargo be transported on privately owned, U.S.-flag commercial vessels to the extent such vessels are available at fair and reasonable rates. In 1985, the Merchant Marine Act of 1936 was amended to require that the percentage of certain agricultural cargoes to be carried on U.S.-flag vessels be increased from 50 to 75 percent.
- Section 901(a). Section 46 U.S.C. 1241(a) requires any officer or employee of the United States traveling on official business overseas or to or from any of the possessions of the United States, unless otherwise noted, must travel and transport his personal effects on ships registered under the laws of the United States.
- The Food Security Act of 1985, amended the Cargo Preference Act of 1954 in order to increase the minimum U.S.-flag requirement from 50 to 75 percent for shipments of agricultural cargoes under certain foreign assistance programs of the United States Department of Agriculture and the Agency for International Development.
- P.L. 105-383 established that substandard vessels and vessels operated by operators of substandard vessels are prohibited from the carriage of Government-impelled cargo for up to one year after such determination has been electronically published.
- Public Resolution (PR) 17 (48 STAT. 500) of the 73rd Congress requires that all cargoes generated by an instrumentality of the Government, such as the Export-Import Bank of the United States, be shipped (100 percent) on U.S.-flag vessels, unless a waiver is granted by the Maritime Administration.
- The Maritime Security Act of 1996, Section 17 of the 1996 Act permits Great Lakes ports to participate in the handling of P.L. 480 Title II humanitarian food aid packaged commodities awarded on a lowest landed cost basis without reference to vessel flag.

The law allows these ports to act as bridge-ports, providing loading and unloading services, even though the cargo actually may be shipped from another port, and thus provides stevedoring jobs during the winter months when the Great Lakes are closed to vessel traffic.”

Another form of cargo preference occurs in the fishing industry. Vessel operators associated with fisheries must be at least owned 75% by American nationals, and under American control, including directorship, voting rights, and other criteria. According to the American Fisheries Act of 2002, “the owners and operators of all the member vessels that are signatories to a fishery cooperative are...responsible for compliance with the requirements of this section.”

5.3 Cargo Security and Inspection Rules

The “24-hour rule” (2002), which is still in effect today, mandates that shipping companies must submit a manifest to U.S. Customs at least 24 hours prior to loading for any goods on a ship to call at or leave a U.S. port.

Also instituted as a security measure, Title 49 sections 450-453 gives the Coast Guard the right to inspect cargo containers used in international transport.

5.4 Other Regulations Affecting Marine Cargo

The TSA and the Coast Guard are working toward effective hiring and human resources practices and standard Transportation Worker Identification Credentials (TWIC). The idea is to pilot once standard identification card that can be across all modes of transportation, but the program is still under development, and there are currently no compliance requirements related to it.

For additional information on regulations affecting ocean cargo, refer to MARAD or the FMC.

6 COMPLIANCE ISSUES FOR AIR CARGO CARRIERS

The airline industry is largely deregulated today. The Civil Aeronautics Board, founded in 1938, regulated routes, prices, and most aspects of airline operations. The Federal Aviation Administration (FAA), which was formed in 1967 to deal with the increasing requirements of air traffic control, took over its responsibilities. The Airline Deregulation Act of 1978 had the effect of focusing the FAA’s responsibilities on safety.

Since the terrorist events of September 11, 2001, the major focus of both cargo and passenger airline compliance has been related to security. The TSA creates and directs security programs through the sky marshal and other air security programs.

6.1 Mandated Security Measures

The Aviation and Transportation Security Act (ATSA) of 2001, passed shortly after the terrorist incidents of 9/11/2001, empowers the TSA to:

- Take over civil aviation security functions
- Require screening of airport security personnel
- Require improved flight deck integrity and protection measures
- Authorize sky marshals to carry firearms and arrest suspects without a warrant. Airlines must provide seats to sky marshals at no cost.
- Mandate pilot programs to test new security technologies in 20 airports.
- Mandate cooperation in cabin crew training for security conditions. “Each air carrier shall develop a flight and cabin crew training program in accordance with that guidance and submit it to the Administrator for approval.”
- Mandate pass-through of the security costs associated with these: “The Under Secretary of Transportation for Security shall impose a uniform fee, on passengers of air carriers and foreign air carriers in air transportation and intrastate air transportation originating at airports in the United States, to pay for the...costs of providing civil aviation security services.”

In a related set of rules, Title 49 requires carriers to share the burden of developing and implementing these safety programs:

- Parts 1544 and 1546 require domestic and foreign carriers, respectively, to carry out security programs that comply with this regulation.
- Part 1548 requires indirect carriers such as freight forwarders, to participate and cooperate with the programs that their partners are mandated to execute.
- Part 1552 prohibits flight schools from providing flight training to aliens without gathering certain security-related information and providing it to the TSA.
- Part 1562 restricts access to airports in and close to Washington DC¹⁰

Also, in FAA-2003-14825-64, the FAA requires certification of airworthiness for new aircraft.

6.2 Limits on Foreign Ownership

The Air Commerce Act of 1926 bars foreign carriers from owning more than 49% of domestic airlines shares and the Civil Aeronautics Act of 1938 bars them from controlling more than 25% of their voting rights. The case for regulation of foreign ownership of airlines has been questioned in recent times. The airline industry may have enough carriers to assure adequate service; but many countries regulate foreign ownership as a matter of national security, public safety, and economic security.

¹⁰ (1) College Park Airport (CGS); (2) Potomac Airfield (VKX); and (3) Washington Executive/Hyde Field (W32)

6.3 Maintenance Records Management

Airlines must maintain highly disciplined maintenance records as a matter of public safety. Regulation 14 CFR (Code of Federal Regulations) Part 91.417 (for maintenance) and 14 CFR Part 43.9 (for repairs), specifies the detail to which work orders must be recorded and maintained. The regulation states that “records of the maintenance, preventive maintenance, and alteration and records of the 100-hour, annual, progressive, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft.” The records must include a detailed description of work performed, dates, and signatures of the mechanics or maintenance management certifying airworthiness.

Although the records can be discarded once the work is completed again or after 12 months, they are almost always retained because complete records are vital to resale value.

6.4 Other Regulations Affecting Air Cargo

For additional information on regulations affecting ocean cargo, the reader is referred to the TSA and the FAA.

7 CONCLUSION

The transportation industry has been substantially deregulated in recent years. However, the rise of terrorism has led to a heightened need for consistent security protocols. The need for increased security, combined with a renewed emphasis on safety, has transformed the regulatory environment from one focused largely on protectionism to one focused on safe and secure global transportation – a goal that while less contentious, will undoubtedly be a continual challenge to achieve.