

Index

- A & P Appledore, Ltd., 109, 136
 administration announcements on maritime policy,
 1982-83, 203-205
 Alaska, 57, 77, 78
 Alaska Navigation Co., 166
 Algeria, 206
 Allis Chalmers Co., 124
 American Bureau of Shipping (ABS), 133, 151
 American President Lines, 73, 124
 American Society of Testing Materials, 111
 American Waterways Shipyard Conference, 88
 AMPAC, 80
 Angola, 206
*Annual Report of the President on the Trade Agreements
 Program, 23*
 Argentina, 206
 Association of West European Shipbuilders (AWES), 34,
 38, 40
 Australia, 206
 Australian National Line (ANL), 126
 AUTOKON system, 136
 Avondale Shipyard, 104, 133, 136

 Bahamas, 25
 Bath Iron Works, 133
 Beaufort Sea, 122, 123
 Belgium, 38
 Bering Strait, 122
 Bethlehem Shipbuilding Co., 105
 Boeing Corp., 137
 Boggs, Congresswoman Lindy, 183
 Bolivia, 207
 Boshwitz, Senator Rudy, 183
 Brazil, 36, 39, 87, 188, 207
 Bureau of Labor Statistics (BLS), 104
 Burma, 207

 Calcutta Shipping Conference of 1875, 69
 California, 78
 Cameroon, 207
 Canada, 23, 43, 122, 123
 CAORF, 133, 134
 cargo policies of 64 foreign countries, 1982-83, 206-218
 Chile, 207
 China, People's Republic of, 39, 41, 173, 186, 188, 208
 Clarke, John, Citibank N. A., 173
 Columbia, 208
 Combustion Engineering Co., 126
 Commission on American Shipbuilding, 109
 compensated gross registered tonnage, (CGRT), 108, 109
 Congress
 General Accounting Office, 72, 158, 184
 House Judiciary Committee, 157, 159
 House Ways and Means Committee, 180
 Senate Finance Committee, 180
 Office of Technology Assessment (OTA), 5, 10, 14, 19,
 110, 113, 185
 questionnaire sent to SNAME'S Ship Technical
 Operations Committee, 130-132
 congressional interest, 12, 13, 14
 construction differential subsidies (CDS), 63, 64, 74, 89,
 152, 153, 154, 155
 Consumer Price Index (CPI), 103
 Containerization International, 62
 Costa Rica, 208
 Crowley Maritime Corp., 77
 Cuba, 208
 cyprus, 25

 Denmark, 41, 208
 Dominican Republic, 208

 economic activity, trade, and shipping, linkage, of, 23
 Ecuador, 208
 E. G. Frankel, Inc., 110
 Egypt, 209
 Ethiopia, 209
 European Economic Community (EEC), 34, 174, 181,
 194
 Export-Import Bank, 67, 179, 180
 Exxon, 78

 Fairbanks Trucking Co., 166
 Far-Eastern Shipping Co., 150
 Federal departments with maritime responsibilities, 219
 Federal Republic of Germany, 27, 209
 Federal Ship Financing Guarantee Program, 155
 FORAN system, 136
 Ford, President Gerald, 183
 France, 41, 209

 Gabon, 209
 General Agreements on Trade and Tariffs (GATT), 173,
 181, 199
 General Dynamics Corp., 122, 126
 General Electric Corp., 137
 General Hydromechanics Research Program, 134
 General Motors Inc., 137
 Ghana, 210
 Greece, 27
 Green, Alan, 190
 gross domestic product (GDP), 42, 43, 44
 gross national product (GNP), 23, 24, 174
 Guam, 79
 Guatemala, 210

 Hawaii, 57, 58, 77, 79
 Heinz, Senator John, 177
 Hiltzheimer, C. I., 81
 Honduras, 25, 210
 Hong Kong, 27
 Hood, Edwin, 96

 India, 36, 210
 Indonesia, 36, 189, 210
 Industrial Development Bank, 156
 Institute for Research and Engineering Automation and
 Productivity in Shipbuilding, 133

- Inter-Governmental Maritime Consultative Organization (IMCO), 151
- International Air Transport Association (IATA), 150
- International and Global Marine Development, Inc., 123
- International Convention on Tonnage Measurement of Ships, 1969, 108
- International Maritime Organization (IMO), 151, 152, 197
- Iran, 211
- Iraq, 211
- Italy, 87, 211
- Ivory Coast, 211
- Jamaica, 211
- Japan, 27, 43
 cargo policies, 211
 shipbuilding, 34, 35, 41, 66, 85, 86, 111
 shipyard safety, 107
 trade outlook, 44
 trading companies, 178
- Jones, Congressman Walter B., 183
- Joint Maritime Congress, 1982, 81
- Kearney Management Consultants, 191
- Korean Shipping Association, 190
- Kuwait, 212
- Latin America, 46, 49
- Lebanon, 25
- legislation
 Act to Regulate Commerce, 1887, 146
 Cabotage Law of 1817, 141, 164
 Cargo Preference Act of 1954, 182
 Controlled Carrier Act (CCA), 150
 Elkins Act, 1903, 147
 Export Trading Company Act of 1982, 178
 Hepburn Act of 1906, 147
 House Resolution, 587, 147
 H.R. 3110, 163
 H.R. 4627, 184
 Intercoastal Shipping Act of 1933, 142
 Interstate Commerce Act (ICA), 146, 147
 Longshoremen's and Harbor Worker's Compensation Act (LHWCA), 108
 Merchant Marine Act of 1920 (Jones Act), 9, 76, 78, 80, 82, 89, 142, 148, 163, 164, 165, 166
 Merchant Marine Act of 1928, 142
 Merchant Marine Act of 1936, 61, 117, 141, 142, 144, 150, 152, 153, 156, 160, 165
 Merchant Marine Act of 1970, 74, 91, 117, 142, 153, 156
 Military Transportation of 1904, 142, 182, 183
 Panama Canal Act of 1912, 147
 Public Resolution 15 of 1934, 142
 Public Resolution 17, 182, 190
 Reciprocity Act of 1828, 142
 Shipping Act of 1916, 9, 13, 69, 72, 142, 147, 148, 157, 159
 Shipping Act of 1983, 13, 71, 72, 158, 159
 Subsidy Act of 1891, 142
- Tariff Act of 1789, 141
- Trade Act of 1974, 142, 181
- Transportation Act of 1940, 147
- less developed countries (LDCS), 23, 39, 43, 49, 60, 61, 66, 185, 191, 192, 193, 197
- Liberia, 25, 27
- Libya, 212
- lighter aboard ship (LASH), 61, 62, 145
- Lloyds Register of Shipping, 126
- Lockheed Shipbuilding Co., 105
- LO/LO cargo, 118
- Long-Term World Economic Outlook, 1987-92, 42***
- Mahan, Admiral Alfred T., 142
- Malaysia, 212
- Malta, 212
- Manalytics, Inc., 190
- Marine Equipment Leasing Inc. (MEL), 96, 105, 112
- maritime cargo policy, 182-200
 bilateral cargo-sharing, 185-193
 U.S. bilateral agreements, 186, 188, 189, 190
 countertrade, 191
 debate, 190
 cargo preference in the United States, 182-185
 financing international trade, 199-200
 commercial assistance, 199
 government assistance, 199
 policies of 64 countries, 206-218
- UNCTAD Liner Code, 193-198
 bulk cargo shipping code, 195
 convention on multimodal transport, 198
 EEC Council, 194, 195
 open registry, 197
 U.S. opposition, 194
- maritime trade patterns, 19
 coal, 21, 30
 crude oil, 22
 grain, 22, 30
 iron ore, 21, 30
 principal commodities, 20
 United States, 23
 world seaborne trade, 20
- Matson Navigation Co., 119
- McLean Trucking Co., 118
- Mexico, 212
- Military Sealift Command, 64, 68, 133, 144, 183
- Mitsubishi, 126
- Morocco, 213
- Mozambique, 213
- National Academy of Sciences, 93
- Maritime Transportation Research Board, 107
- Structures Committee, 135
- National Research Council (NRC), 117, 135
- National Security Council, 179, 180
- National Shipbuilding Research Program, 15, 133
- Naval Sea Systems Command, 133, 135
- Netherlands, 38
- New England Electric, 126
- Newport News Shipbuilding, 133, 136

- New York, 118
 Nicaragua, 213
 Nigeria, 213
 Norway, 27
- Occidental Petroleum Corp., 192
 Office of Management and Budget, 156
 Office of Maritime Affairs and Shipbuilding Technology, 103
 Oman, 25
 operating differential subsidies (ODS), 59, 61, 64, 79, 150, 152, 153, 154, 155
 Organisation for Economic Cooperation and Development (OECD), 23, 24, 29, 31, 32, 39, 42, 73, 108, 174, 197
 Organization of Petroleum Exporting Countries (OPEC), 44
 Overseas Private Investment Corp. (OPIC), 179, 180
- Pakistan, 213
 Panama, 25, 27
 Pan American Steamship Co., 118
 Paraguay, 213
 Peru, 213
 Philippines, 189, 214
 Poland, 41
 Portugal, 215
 Puerto Rico, 57, 58, 77, 79
 Pugh-Roberts Associates, 93
- Quincy, Mass., 126
- Reagan administration, 179, 203
 Reagan, President Ronald, 177, 180
 research and development (R&D), 14, 15, 97, 113, 117, 132, 133, 134, 135, 136, 137, 138
 'Review of Existing Agreements and Potential Cargo Sharing Arrangements, 1981', 70
 Romania, 41
 RO/RO ships, 25, 31, 57, 61, 62, 80, 118, 144, 145, 163
- Saudi Arabia, 215
 Seafarers International Union, 194
 Sea-Land, 59, 66, 68, 81, 118, 119
 Seatrain Shipbuilding Corp., 165
 Shell Oil Co., 123
 Shipbuilders Association of Japan (SAJ), 38, 40, 41
 Shipbuilders Council of America (SCA), 88, 91, 96, 162
Shipbuilding Research and Development: A Recommended Program, 112
 ship design and operating technology
 maritime R&D, 132-138
 Federal role, 137
 MarAd R&D program, 133
 CAORF, 134
 cargo handling, 133
 National Shipbuilding Research Program, 133
 U.S. Navy R&D related to the merchant marine, 134-137
 computer-aided design and manufacture (CAD/CAM), 135, 136
 operations, technological innovation in, 129-132
 OTA questionnaire, 130-132
 overview, 117
 status and trends
 advanced hull forms, 123
 arctic transportation, 121
 environmental concerns, 123
 LNG tankers, 122
 political considerations, 123
 submarine tankers, 122
 bulk trades, technological innovation in, 120
 liner trades, technological innovation in, 118
 containerization, 118, 119
 lift-on/lift-off (LO/LO) cargo, 118
 RO/RO cargo, 119
 trends in propulsion technology, 123
 advanced powerplants, 127
 alternate fuels, 124
 diesel, 124
 propulsor technology, 127-129
 sail propulsion, 129
 steam-power, 124
- Singapore, 25, 215
 Slater, Paul, Chairman, Pelican Finance Corp., 173
 Smith, Congresswoman Virginia, 183
 Snyder, Congressman Gene, 162
 Society of Naval Architects and Marine Engineers (SNAME), 117, 130
 OTA questionnaire, 130
 R&D, 133
 Sohio Alaska Petroleum Corp., 123
 South Africa, 215
 South Korea, 24
 cargo policies, 211
 bilateral agreement, 190
 shipbuilding, 35, 36, 38, 41, 66, 85, 86, 111
 Spain, 41, 87, 98, 215
 Sparrows Point, Md., 105
 Sri Lanka, 216
 Sudan, 216
 Suez Canal, 69
 Sulzer Brothers Ltd., 124
 Sweden, 87, 109
- Taiwan, 24, 36, 39, 41, 216
 Tanzania, 216
 Thailand, 216
 "The Five-Year National Shipbuilding Productivity Improvement Plan (1983-88)," 133
The Influence of Sea Power Upon History, 1660-1783, 142
The Motor Ship, 120
 Todd Pacific Shipyard, 133
 trade policies
 enforcement of fair trade laws, 181
 international, 1945-75, 174, 175
 GATT, 175, 176

- International Trade Organization (ITO), 175
- Multinational Trade Negotiations, 174
- present trade policy, 175
- overview, 173
- U.S. policy, 176
 - export trading companies, 178
 - reorganization of Federal agencies, 179
- Trinidad and Tobago, 216
- Tunisia, 216
- Turkey, 217
- United Kingdom, 27, 87, 217
- United Nations (U. N.), 42, 193
- United Nations Conference on Trade and Development (UNCTAD), 5, 173
 - Code of Conduct for Liner Operations, 11, 185, 190, 191, 193-198
- Uruguay, 217
- U.S. Agency for International Development (AID), 67, 75, 182, 184
- U.S. Bureau of Census, 42
- U.S. Civil Aeronautics Board (CAB), 150
- U.S. Department of Agriculture (USDA), 179
- U.S. Coast Guard (USCG), 132, 219
 - safety regulations, 151, 152
- U.S. Department of Commerce, 179, 180, 181, 219
- U.S. Department of Defense (DOD), 143, 144
- U.S. Department of International Trade and Industry (DITI), 179, 180
- U.S. Department of Justice, 149, 158, 159, 165, 219
- U.S. Department of State, 179, 189, 220
- U.S. Department of Transportation (DOT), 73, 155, 162, 165, 219
 - Secretary Drew Lewis, 154
- U.S. Department of Treasury, 179
- U.S. Federal Maritime Commission (FMC), 69, 71, 72, 79, 147, 148, 149, 150, 157, 158, 159, 190, 203, 220
- U.S. Federal Trade Commission (FTC), 159
- U.S. Internal Revenue Service (IRS), 160
- U.S. International Trade Commission (ITC), 179, 192
- U.S. Interstate Commerce Commission (ICC), 79, 146, 147, 148, 166, 220
- U.S. Lines, 62, 73, 80, 155
- U.S. Maritime Administration (MarAd), 14, 15, 59, 61, 63, 66, 74, 80, 81, 87, 90, 96, 99, 117, 124, 127, 132, 138, 143, 179, 184, 219
 - "Cost Impact of U.S. Government Regulations on U.S.-Flag Ocean Carriers," study, 152
 - Federal Ship Financing Fund, 156
 - IHI-Livingston project, 107
 - Maritime Subsidy Board, 150
 - Office of Maritime Labor and Training, 102
 - R&D program, 133-134
- U.S. maritime policies
 - cabotage policies, 163-168
 - Alaskan oil, 164
 - exceptions, waivers, and suspensions, 164
 - Jones Act "fleet," 164
 - proposal changes to the Jones Act, 166
 - development of, 141-152
 - comparison with other transportation policy, 146-151
 - U.S. v. international regulations, 149-151
 - history, 141-142
 - policies for the future, 143-146
 - industrial changes, 143
 - national defense, 143
 - U.S.S.R. comparison, 144-146
 - U.S. Coast Guard safety regulations, 151-152
 - regulatory policy, 157-159
 - Shipping Act, 157, 158, 159
 - subsidy policy, 152-157
 - Capital Construction Funds (CCF), 153
 - construction differential subsidies (CDS), 153, 154, 155
 - maritime subsidy outlays, 1936-80, 154
 - operating differential subsidies (ODS), 153, 154, 155
 - ship financing guarantees, 155-156
 - taxation policies, 160-163
 - accelerated cost recovery (ACRS), 163
 - Capital Construction Funds, 160, 161, 162
 - Construction Reserve Funds, 160, 162
 - deferrals, 161
 - investment tax credits, 163
- U.S. Navy, 7, 9, 10, 15, 39, 64, 86, 88, 89, 90, 93, 102, 114, 132, 134, 135, 136, 144, 153, 163, 219
- U.S. shipbuilding industry
 - "Active Shipbuilding Industrial Base" (ASIB), 87, 88, 89, 90, 91, 92, 94, 100, 101, 105
 - characteristics of, 87-106
 - comparison with Japan-Korea, 86, 98
 - computer-aided design/computer-aided manufacturing @AD/CAM), 99, 111
 - decline in new buildings, 9, 86
 - definition of, 87
 - Federal funds, elimination of, 9, 86
 - labor force, 100, 113
 - management problem, 113
 - markets of, 89
 - military ships, 89, 90
 - orders, 91, 93
 - physical facilities problem, 112
 - productivity, 106-112
 - determinants of, 106
 - "buy America" policy, 108
 - length of building cycle, 106
 - man-hours required, 107
 - nonproductive peripheral costs, 107
 - shipyard safety, 107
 - improving of, 110-112
 - E. G. Frankel report, 110
 - management, 111
 - standards, 111
 - trends, 108-110
 - comparison, Japan-Korea, 109
 - shipyard work force
 - characteristics of, 102
 - method of wage payment, 103

- workers' hours and earnings, 102
- international wage levels, comparison of, 104
- organization of labor, 104
- unions, 106
- size, 9, 39, 85
- technology, level of, 96-99
- U.S. shipyards, capabilities of, 94-96
- U.S. shipyards comprising the ASIB, 88
- U.S. Shipping Board, 147
- U.S. shipping industry
 - bulk fleet, 8, 19
 - condition of, 8
 - lack of effective maritime policies, 5, 8
 - liner fleet, 8, 19, 25
 - ownership, 57
 - seaborne trade, 50
 - trade outlook, 52
 - trade patterns, 48
 - U.S. bulk fleet, 73-76
 - CDS-built tanker fleet, 74
 - competition, 75
 - construction costs, 73, 74
 - operating expenses, 73
 - U.S. dry-bulk carriers, 75
 - U.S. domestic fleet, 76-81
 - barge service, 77
 - crude oil trade, 78
 - foreign-built ships, use of, 79
 - regulation of, 79
 - tanker trades, 77
 - technological developments, 80
 - U.S.-effective-control fleet, 57, 58
 - U.S. liner industry, 59-73
 - cargo preference, influence of, 67, 68
 - conferences, pool ing, and cooperatives, 68, 69, 70
 - consortium, 70
 - containerization, 65, 71
 - containerships, 61, 62
 - cost, productivity, and competitiveness, 65, 66, 67
 - crew size, reduction of, 62, 73
 - flexible capabilities, 62
 - foreign trade, share of, 61
 - future competitiveness of, 72, 73
 - intermodal service, 65
 - joint service, 70
 - joint venture, 70
 - lighter-aboard-ship (LASH), 61, 62
 - pricing, rates, and shippers' councils, 71, 72
 - technological developments, 61
 - terminals, automation of, 63
 - trade, 59, 60
 - U.S.-flag fleet, 59, 61, 81-82
 - value-of-service pricing, 71
 - U.S. Supreme Court, 74, 165
 - U. S. S. R., 27, 31, 32, 44, 47, 80, 123, 186, 188
 - comparison with the United States, 144, 145, 146
 - Five-Year Plan (1981-85), 145
 - U.S. Trade Representative (USTR), 23, 179, 180, 181, 199, 220
 - Venezuela, 217
 - very large crude carriers (VLCCS), 29, 32, 74, 120
 - Wharton Econometrics, Inc., 19, 42, 76
 - World Economic Outlook*, 42
 - world economic and trade outlook
 - centrally planned economies (CPES), 43
 - dry-bulk goods, 46, 48, 49
 - economic forecast, 42
 - liquid-bulk cargoes, 46, 47, 49
 - seaborne trade, 44
 - trade flows, 43-44
 - U.S. trade patterns and networks, 48
 - world shipbuilding industry
 - in Brazil, 39
 - in China, 39
 - commercial merchant shipbuilding, 40
 - employment in AWES, 38
 - financing of, 39
 - in Japan, 34, 38, 66, 98
 - laser use, 99
 - LDCS, 39
 - production, 35
 - ships on order, 37
 - shipyard capabilities and capacities, 34, 38
 - in South Korea, 36, 38, 66, 98
 - in Taiwan, 39
 - in United States (see U.S. shipbuilding industry)
 - workers compensation, 104
 - world shipping industry
 - containerization, 32
 - general cargo, 31
 - national fleets, trends in, 32
 - overview, 25
 - shipping economics, 32
 - ship types and features, trends in, 32
 - United States (see U.S. shipping industry)
 - world bulk fleet, 30
 - Yugoslavia, 217
 - Zaire, 218