

Rec #: M-08-010, H-04-029, H-94-009, H-04-030, H-04-031, I-94-003, I-94-004, I-94-006, I-94-007, I-95-002, M-94-037, R-94-009, R-94-010, R-94-011, R-94-012, H-94-008, M-94-010, M-94-012, M-94-013, M-94-014, M-89-069, M-89-070, M-89-071, M-89-072, M-89-073, M-89-074, M-89-075, M-89-076, M-89-077, M-89-078, M-89-079, M-89-080, M-89-081, M-89-082, M-89-083, M-89-084, M-81-011, M-81-012, M-81-013, M-81-015, M-81-016, M-81-017, M-81-018, M-81-019, M-81-020, M-81-021, M-81-022, M-81-023, H-78-001, H-78-002, H-78-003, H-78-004, H-78-005, M-78-001, H-74-040, H-74-041, H-74-042, H-74-043, H-72-048, M-74-014, M-74-016, M-74-019, M-74-001, M-74-003, M-74-004, M-74-005

Recommendation #	Overall Status	Date Closed	Subject
H-04-029	CAAA	12/11/09	TO THE FEDERAL HIGHWAY ADMINISTRATION: Revise your sufficiency rating system, which prioritizes bridges for rehabilitation and replacement, to include the probability of extreme events, such as vessel impact. (Supersedes Safety Recommendation H-94-009)
H-04-030	CAAA	01/11/13	TO THE FEDERAL HIGHWAY ADMINISTRATION: Develop an effective motorist warning system to stop motor vehicle traffic in the event of a partial or total bridge collapse.
H-04-031	CAA	11/14/13	TO THE AMERICAN ASSOCIATION OF STATE AND HIGHWAY AND TRANSPORTATION OFFICIALS: Once an effective motorist warning system has been developed, provide guidance to the States on its use.
H-72-048	CAA	01/01/80	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION, THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, AND THE INTERNATIONAL BRIDGE, TUNNEL AND TURNPIKE ASSOCIATION: ESTABLISH POLICIES AND STANDARDS TO INSURE THAT STANDARD TRAFFIC CONTROL DEVICES (GATE, SIGNALS, SIGNS, AND PAVEMENT MARKINGS) ARE INSTALLED ON MOVABLE BRIDGES AT LOCATIONS WHICH WILL HALT TRAFFIC ON A SECTION OF THE BRIDGE THAT IS NOT SUBJECT TO IMPACT BY LARGE MARINE VESSELS. SUCH POSITIONING OF WARNING SYSTEMS WILL PREVENT VEHICLES FROM BEING ON THOSE PORTIONS OF SUCH BRIDGES WHICH MAY COLLAPSE WHEN THEY ARE STRUCK BY A MARINE VESSEL.
H-74-040	CAA	01/01/80	THE NTSB RECOMMENDS THAT THE GREATER NEW ORLEANS EXPRESSWAY COMMISSION TAKE THE FOLLOWING MEASURES: ESTABLISH A SYSTEMATIC PROGRAM TO IDENTIFY AND SURVEY HIGH ACCIDENT LOCATIONS ON THE LAKE PONTCHARTRAIN CAUSEWAY. (THE PROGRAM REQUIRES REVIEW OF INDIVIDUAL ACCIDENTS.) GUIDELINES FOR SUCH A PROGRAM CAN BE FOUND IN FEDERAL HIGHWAY SAFETY PROGRAM STANDARD NO. 9, "IDENTIFICATION AND SURVEILLANCE OF ACCIDENT LOCATIONS."
H-74-041	CAA	01/01/80	THE NTSB RECOMMENDS THAT THE GREATER NEW ORLEANS EXPRESSWAY COMMISSION TAKE THE FOLLOWING MEASURES: EVALUATE THE PRESENT BRIDGE BARRIER RAIL SYSTEM ON THE WEST SPAN OF THE LAKE PONTCHARTRAIN CAUSEWAY TO DETERMINE IMPROVEMENTS WHICH WILL ASSURE A BARRIER SYSTEM THAT WILL: (A) PREVENT ERRANT VEHICLES FROM PENETRATING OR VAULTING OVER THE BARRIER, AND (B) PROVIDE SAFE REDIRECTION OF ERRANT VEHICLES WITH A MINIMUM EFFECT ON THE VEHICLE AND ITS OCCUPANTS.



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H-74-042	CAA	01/01/80	THE NTSB RECOMMENDS THAT THE GREATER NEW ORLEANS EXPRESSWAY COMMISSION TAKE THE FOLLOWING MEASURES: INSTALL A WARNING SYSTEM ON THOSE SECTIONS OF THE LAKE PONTCHARTRAIN CAUSEWAY THAT ARE VULNERABLE TO IMPACT BY ERRANT MARINE VESSELS. THE SYSTEM SHOULD ACTIVATE AUTOMATICALLY TO WARN MOTORISTS OF DANGER AHEAD, SHOULD THE CAUSEWAY SPAN COLLAPSES.
H-74-043	CNLA	08/21/95	THE NTSB RECOMMENDS THAT THE LOUISIANA WILDLIFE AND FISHERIES COMMISSION: MAINTAIN A SAFETY INSPECTION PROGRAM WHICH WILL INSURE COMPLIANCE WITH ITS "MINIMAL SAFETY RULES APPLICABLE TO TUGS AND TOWS OPERATING IN LAKE PONTCHARTRAIN," AS ADOPTED ON JULY 20, 1968.
H-78-001	CR	12/12/78	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: STUDY AND PUBLISH A REPORT ON THE COMPLETENESS AND EFFECTIVENESS OF ITS BRIDGE CLASSIFICATION/INSPECTION PROGRAM UNDER 23 USC 144, 23 CFR 650, AND THE AASHTO "MANUAL FOR MAINTENANCE INSPECTION OF BRIDGES" PART 2.5, ESPECIALLY AS TO BRIDGES OVER NAVIGABLE CHANNELS, FOR THEIR ABILITY TO SUSTAIN PIER IMPACT AT WATER LEVEL AND FOR THE DESIGN OF THE TRAFFIC CONTROL SYSTEM ON THE BRIDGES.
H-78-002	CAA	12/05/84	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: WORK WITH THE U.S. COAST GUARD TO DEVELOP SPECIFICATIONS FOR THE DESIGN OF DOLPHINS, FENDERS, AND OTHER ENERGY ABSORPTION AND/OR VESSEL REDIRECTION DEVICES FOR THE PROTECTION OF BOTH BRIDGE AND VESSEL DURING AN ACCIDENTAL IMPACT. ISSUE THESE DESIGN SPECIFICATIONS ALONG WITH GUIDELINES AND REQUIREMENTS FOR THE PLACEMENT OF DOLPHINS, FENDERS, AND ENERGY ABSORPTION AND REDIRECTION DEVICES.
H-78-003	CAA	04/20/84	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: BRING TOGETHER IN ONE PUBLICATON ALL GUIDELINES FOR TRAFFIC CONTROL AT MOVABLE BRIDGES, INCLUDING SIGNS, SIGNALS, PAVEMENT MARKINGS, AND RESTRAINT DEVICES.
H-78-004	CAAA	04/19/85	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: INCLUDE AS PART OF THE FEDERAL-AID HIGHWAY PROGRAM MANUAL 6.8.3.4 PARAGRAPH 5D(3), "SPECIAL PURPOSE SURVEILLANCE AND CONTROL SYSTEMS," A DESCRIPTION OF SURVEILLANCE AND CONTROL SYSTEMS USED ON MULTISPAN BRIDGES OVER WIDE NAVIGABLE WATERWAYS.
H-78-005	CAA	08/23/83	THE NTSB RECOMMENDS THAT THE COMMONWEALTH OF VIRGINIA: IN REBUILDING THE BENJAMIN HARRISON BRIDGE, COMPLY WITH THE FEDERAL HIGHWAY ADMINISTRATION GUIDELINES IN PROVIDING AND LOCATING WARNING SIGNALS AND GATES AND ALL OTHER REQUIRED TRAFFIC CONTROL DEVICES.



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H-94-008	CNLA	10/07/97	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: IN COOPERATION WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS, BROADEN THE APPLICATION OF RISK-ASSESSMENT AND MANAGEMENT PROGRAMS TO EXISTING HIGHWAY BRIDGES. SUCH PROGRAMS SHOULD INCLUDE, AMONG OTHER THINGS, A FORMAL ASSESSMENT OF THE VULNERABILITY OF BRIDGES TO VESSEL COLLISION AND COLLAPSE.
H-94-009	CS	09/09/04	TO THE AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS: In cooperation with the Federal Highway Administration, broaden the application of risk-assessment and management programs to existing bridges. Such programs should include, among other things, a formal assessment of the vulnerability of bridges to vessel collision and collapse. (Superseded by H-04-29)
I-94-003	CAAA	10/27/98	THE NTSB RECOMMENDS THAT THE DEPARTMENT OF TRANSPORTATION: CONVENE AN INTERMODAL TASK FORCE THAT INCLUDES THE COAST GUARD, THE FEDERAL RAILROAD ADMINISTRATION, AND THE U.S. ARMY CORPS OF ENGINEERS TO DEVELOP A STANDARD METHODOLOGY FOR DETERMINING THE VULNERABILITY OF THE NATION'S HIGHWAY AND RAILROAD BRIDGES TO COLLISIONS FROM MARINE VESSELS, TO FORMULATE A RANKING SYSTEM FOR IDENTIFYING BRIDGES AT GREATEST RISK, AND TO PROVIDE GUIDANCE ON THE EFFECTIVENESS AND APPROPRIATENESS OF PROTECTIVE MEASURES.
I-94-004	CAAA	10/27/98	THE NTSB RECOMMENDS THAT THE DEPARTMENT OF TRANSPORTATION: REQUIRE THAT THE FEDERAL RAILROAD ADMINISTRATION AND THE FEDERAL HIGHWAY ADMINISTRATION, FOR THEIR RESPECTIVE MODES, USE THE METHODOLOGY DEVELOPED BY THE INTERMODAL TASK FORCE TO CARRY OUT A NATIONAL RISK ASSESSMENT PROGRAM FOR THE NATION'S RAILROAD AND HIGHWAY BRIDGES.
I-94-006	CAA	04/24/95	THE NTSB RECOMMENDS THAT THE DEPARTMENT OF TRANSPORTATION: CONSIDER THE USE OF RACONS, RADAR REFLECTORS, AND OTHER DEVICES TO MAKE BRIDGES MORE IDENTIFIABLE ON RADAR.
I-94-007	CAAA	05/08/00	THE NTSB RECOMMENDS THAT THE U.S. ARMY CORPS OF ENGINEERS: COOPERATE WITH THE U.S. DEPARTMENT OF TRANSPORTATION IN DEVELOPING A STANDARD METHODOLOGY FOR DETERMINING THE VULNERABILITY OF THE NATION'S HIGHWAY AND RAILROAD BRIDGES TO COLLISIONS FROM MARINE VESSELS, FORMULATING A RANKING SYSTEM TO IDENTIFY BRIDGES AT GREATEST RISK, AND PROVIDING GUIDANCE ON THE EFFECTIVENESS AND APPROPRIATENESS OF PROTECTIVE MEASURES.
I-95-002	CAA	07/23/98	THE NTSB RECOMMENDS THAT THE DOT, OFFICE OF INTERMODALISM: ESTABLISH A MECHANISM TO ENSURE THAT A COMPLETE LIST OF BRIDGES VULNERABLE TO IMPACT BY COMMERCIAL MARINE TRAFFIC, WITH EXACT LOCATIONS, IS DISSEMINATED TO ALL EMERGENCY RESPONSE SERVICES SO THAT ALL BRIDGES CAN BE EASILY IDENTIFIED IN AN EMERGENCY SITUATION.



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M-08-010	CEX	03/19/10	TO THE BOARD OF NEW ORLEANS-BATON ROUGE STEAMSHIP PILOT EXAMINERS FOR THE MISSISSIPPI RIVER: Verify that the pilots assigned to challenging locations such as the Apex dock have received adequate training in docking and undocking large vessels at such locations.
M-74-001	CAA	06/30/76	EXPEDITE THE PROMULGATION OF REGULATIONS REGARDING VESSEL CONTROL IN THE VICINITY OF THE CHESAPEAKE BAY BRIDGE AND TUNNEL.
M-74-003	CUA	06/21/82	PUBLISH AND MAKE AVAILABLE TO TOWBOAT OPERATORS GUIDELINES FOR SAFE OPERATING PROCEDURES FOR TOWING OPERATIONS. THESE GUIDELINES SHOULD INCLUDE METHODS OF PREPLANNING A VOYAGE, THE PROPER USE OF TOWING HAWSERS, AND ACTIONS TO BE TAKEN IN VARIOUS EMERGENCY SITUATIONS.
M-74-004	CAA	06/13/77	DETERMINE THE NEED FOR ANCHORS ON UNMANNED BARGES AND PRACTICAL METHODS OF CONTROLLING SUCH ANCHORS IN ORDER TO PREVENT DAMAGE TO ANY VESSEL, BRIDGE, OR OTHER STRUCTURE, OR OTHER LOSS TO BYSTANDERS ON THE NAVIGABLE WATERS OF THE UNITED STATES.
M-74-005	CAA	05/04/78	PLACE ADDITIONAL EMPHASIS IN ITS SEARCH AND RESCUE PROCEDURES ON PROTECTING BRIDGES FROM VESSEL IMPACTS.
M-74-014	CR	02/18/86	THE COAST GUARD REQUIRE THAT OCEAN-GOING VESSELS BE ALIGNED WITH ANY CHANNEL BRIDGE OPENING BEFORE THE VESSELS REACH A POINT EQUAL TO THE SHIP'S STOPPING DISTANCE FROM THE BRIDGE.
M-74-015	CUA	07/10/81	THE COAST GUARD REQUIRE THAT EVERY MASTER OF AN OCEAN-GOING VESSEL INFORM HIMSELF OF THE PILOT'S PLAN TO MANEUVER HIS SHIP IN OR OUT OF A HARBOR AND THAT THE MASTER DETERMINE, WITH THE PILOT'S ASSISTANCE, THE CRITICAL ASPECTS OF THE MANEUVER, INCLUDING THE PILOT'S PLAN FOR EMERGENCIES. THE MASTER SHOULD THEN BE REQUIRED TO INSTRUCT HIS CREW TO INSURE THAT HIGH-RISK TASKS RECEIVE PRIORITY.
M-74-016	CAA	06/30/76	THE COAST GUARD EXPEDITE THE ISSUANCE OF REGULATIONS REQUIRING THAT ALL OCEAN-GOING VESSELS BE PROVIDED WITH STOPPING DISTANCES AND TURNING RADII FOR VARIOUS SPEEDS AND LOADING CONDITIONS.
M-74-019	CAAA	04/07/77	THE COAST GUARD, IN PROCESSING APPLICATIONS FOR HIGHWAY, RAILROAD, OR PIPELINE BRIDGE CONSTRUCTION, REQUIRE A SAFETY IMPACT STUDY AS WELL AS THE ENVIRONMENTAL IMPACT STUDY. LIFT SPAN BRIDGES WITH NARROW OPENINGS, SUPPORTS IN RELATIVELY DEEP WATER, AND LOCATIONS NEAR CURVED CHANNELS SHOULD BE CONSIDERED RELATIVELY HAZARDOUS.



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M-78-001	CAA	09/01/87	EXPEDITE THE SUBMISSION OF THE LEGISLATIVE PROPOSAL AND URGE CONGRESS TO ENACT LEGISLATION, OR AUTHORIZE THE COAST GUARD TO UNDERTAKE RULEMAKING, TO ESTABLISH IN THE NAVIGATION RULES FOR INLAND WATERS A REQUIREMENT FOR VESSELS TO PROCEED AT A SAFE SPEED IDENTICAL TO THE REQUIREMENT ESTABLISHED BY RULE 6 OF THE NEWLY ADOPTED INTERNATIONAL CONVENTION FOR VESSELS ON THE HIGH SEAS WHICH BECAME EFFECTIVE ON JULY 15, 1977.
M-81-011	CAA	05/04/82	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: IMPROVE NAVIGATIONAL AIDS FOR VESSELS PASSING UNDER THE SUNSHINE SKYWAY BRIDGE.
M-81-012	CR	08/01/88	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: PROHIBIT VESSELS FROM MEETING NEAR THE SHUNSHINE SKYWAY BRIDGE.
M-81-013	CAA	09/01/87	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: IN COOPERATION WITH LOCAL PORT AND BRIDGE AUTHORITIES, DETERMINE THE FEASIBILITY OF INSTALLING NONSTRUCTURAL BRIDGE PROTECTION DEVICES FOR THE SUNSHINE SKYWAY BRIDGE.
M-81-015	CAA	09/01/87	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: IN COOPERATION WITH THE FEDERAL HIGHWAY ADMINISTRATION, DEVELOP STANDARDS FOR THE DESIGN, PERFORMANCE, AND LOCATION OF STRUCTURAL BRIDGE PIER PROTECTION SYSTEMS WHICH CONSIDER THAT THE IMPACT FROM AN OFF-COURSE VESSEL CAN OCCUR SIGNIFICANTLY ABOVE AS WELL AS BELOW THE WATER SURFACE.
M-81-016	CUA	04/13/88	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: IN COOPERATION WITH THE FEDERAL HIGHWAY ADMINISTRATION, CONDUCT A STUDY TO DETERMINE WHICH EXISTING BRIDGES OVER THE NAVIGABLE WATERWAYS OF UNITED STATES PORTS AND HARBORS ARE NOT EQUIPPED WITH ADEQUATE STRUCTURAL PIER PROTECTION.
M-81-017	CAA	09/01/87	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: DISTRIBUTE A COPY OF THE RESULTS OF THE COAST GUARD'S STUDIES REGARDING BRIDGE AND PIER PROTECTION SYSTEMS TO EACH APPROPRIATE MEMBER OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.
M-81-018	CAA	05/04/83	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: DEVELOP STANDARDS FOR THE DESIGN, PERFORMANCE, AND INSTALLATION OF BRIDGE SPAN FAILURE DETECTION AND WARNING SYSTEMS.
M-81-019	CAA	05/04/83	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: ESTABLISH CRITERIA TO EVALUATE THE NEED FOR INSTALLING BRIDGE SPAN FAILURE DETECTION AND WARNING SYSTEMS ON EXISTING AND PROPOSED BRIDGES.



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M-81-020	CAA	12/05/84	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: IN COOPERATION WITH THE U.S. COAST GUARD, DEVELOP STANDARDS FOR THE DESIGN, PERFORMANCE, AND LOCATION OF STRUCTURAL BRIDGE PIER PROTECTION SYSTEMS WHICH CONSIDER THAT THE IMPACT FROM AN OFF COURSE VESSEL CAN OCCUR SIGNIFICANTLY ABOVE AS WELL AS BELOW THE WATER SURFACE.
M-81-021	CAAA	11/19/85	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: IN COOPERATION WITH THE U.S. COAST GUARD, CONDUCT A STUDY TO DETERMINE WHICH EXISTING BRIDGES OVER THE NAVIGABLE WATERWAYS OF UNITED STATES PORTS AND HARBORS ARE NOT EQUIPPED WITH ADEQUATE STRUCTURAL PIER PROTECTION.
M-81-022	CAAA	04/19/85	THE NTSB RECOMMENDS THAT THE FEDERAL HIGHWAY ADMINISTRATION: USE THE RESULTS OF THE STUDY CONDUCTED UNDER RECOMMENDATION M-81-21 TO ADVISE APPROPRIATE BRIDGE AUTHORITIES OF THE BENEFITS OF INSTALLING ADDITIONAL PIER PROTECTION SYSTEMS.
M-81-023	CAA	10/06/92	THE NTSB RECOMMENDS THAT THE STATE OF FLORIDA: PROVIDE STRUCTURAL PIER PROTECTION FOR THE CANTILEVER ARM PIERS AND THE ANCHOR ARM PIERS OF THE SUNSHINE SKYWAY BRIDGE.
M-89-069	CUA	12/08/92	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: REQUIRE OWNERS/OPERATORS OF BASCULE BRIDGES TO INSTALL CAUTION LIGHTS AND DAYLIGHT MARKINGS AT ELEVATION POINTS ON BRIDGE LEAFS WHERE THEY PROTRUDE OVER NAVIGABLE CHANNELS TO IDENTIFY TO MARINERS THE POINT AT WHICH FULL SKYWARD CHANNEL CLEARANCE IS NOT AVAILABLE TO TRANSITING VESSELS; THE LIGHTS SHOULD ACTIVATE WHEN THE BRIDGELEAFS ARE IN THE NORMAL FULLY OPEN POSITION.
M-89-070	CUA	12/08/92	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: REQUIRE THAT BRIDGE OWNERS/OPERATORS PROVIDE IN BASCULE BRIDGE PERMIT APPLICATIONS THE ANGLE OF THE BRIDGELEAF(S), THE MAXIMUM VERTICAL CLEARANCE AT THE FENDERS AND AT THE BRIDGELEAF ENDS, AND THE EXTENT OF HORIZONTAL CHANNEL CLEARANCE OVER WHICH FULL SKYWARD CLEARANCE IS AVAILABLE WHEN THE BRIDGE LEAFS ARE IN THE FULLY OPEN POSITION.
M-89-071	CAA	11/28/94	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: ISSUE A NOTICE TO MARINERS STATING THAT BECAUSE SOME BASCULE BRIDGE LEAFS PROTRUDE OVER THE WATERWAY IN THE FULLY OPEN POSITION, UNLIMITED SKYWARD CLEARANCE MAY NOT BE AVAILABLE TO VESSELS WITH HIGH FREEBOARD, FULL WIDTH SUPERSTRUCTURES FOR THE ENTIRE CHARTED HORIZONTAL CLEARANCE.



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M-89-072	CUA	11/28/94	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: COORDINATE WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND THE U.S. ARMY CORPS OF ENGINEERS TO INCORPORATE THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE ON CHARTS AND IN NAUTICAL PUBLICATIONS AVAILABLE TO MARINERS OF VESSELS OPERATING IN U.S. NAVIGABLE WATERS: THE VERTICAL HEIGHT FROM THE DATUM WATER LEVEL AT THE BRIDGE TO THE POINT WHERE A BASCULE BRIDGELEAF BEGINS TO PROTRUDE OVER DRAW FENDERS OR THE EDGE OF THE CHANNEL, AND THE VERTICAL HEIGHT FROM THE DATUM TO THE END OF THE FULLY OPEN BASCULE BRIDGELEAF.
M-89-073	CAA	12/08/92	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: COORDINATE WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND THE U.S. ARMY CORPS OF ENGINEERS TO INCORPORATE THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE ON CHARTS AND IN NAUTICAL PUBLICATIONS AVAILABLE TO MARINERS OF VESSELS OPERATING IN U.S. NAVIGABLE WATERS: THE EXTENT OF HORIZONTAL CHANNEL CLEARANCE OVER WHICH FULLY SKYWARD CLEARANCE IS AVAILABLE FROM THE RAISED END OF FULLY OPEN BASCULE BRIDGE LEAF(S).
M-89-074	CUA	11/28/94	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: COORDINATE WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND THE U.S. ARMY CORPS OF ENGINEERS TO INCORPORATE THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE ON CHARTS AND IN NAUTICAL PUBLICATIONS AVAILABLE TO MARINERS OF VESSELS OPERATING IN U.S. NAVIGABLE WATERS: THE ANGLE OF BASCULE BRIDGELEAFS WHEN IN THE FULLY OPEN POSITION.
M-89-075	CUA	11/28/94	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: COORDINATE WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND THE U.S. ARMY CORPS OF ENGINEERS TO INCORPORATE THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE ON CHARTS AND IN NAUTICAL PUBLICATIONS AVAILABLE TO MARINERS OF VESSELS OPERATING IN U.S. NAVIGABLE WATERS: DEPICTIONS SHOWING WHETHER A BASCULE BRIDGE OVER A NAVIGABLE WATERWAY IS SINGLE- OR DOUBLE-LEAF AND, IF SINGLE-LEAF, ON WHICH SIDE OF THE WATERWAY THE BASE PIVOT POINT OF THE LEAF IS LOCATED.
M-89-076	CAA	11/28/94	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: CONDUCT A ONE TIME SURVEY OF DRAWBRIDGES TO DETERMINE THAT THE GREEN NAVIGATION LIGHTS ACTIVATE, BUT ONLY WHEN DRAWBRIDGES ARE AT THEIR NORMAL FULLY OPEN POSITIONS.
M-89-077	CAA	12/08/92	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: CONDUCT PERIODIC INSPECTIONS OF DRAWBRIDGES OVER U.S. NAVIGABLE WATERS TO DETERMINE THAT THEY ARE BEING PROPERLY OPERATED AND THEIR NAVIGATION LIGHTS ARE BEING PROPERLY MAINTAINED.



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M-89-078	CUA	05/07/91	THE NTSB RECOMMENDS THAT THE FEDERAL RAILROAD ADMINISTRATION: AMEND 49 CFR 219.201 TO INCLUDE SERIOUS ACCIDENTS INVOLVING RAILROAD BRIDGES AND THE OPERATORS OF THESE BRIDGES EVEN WHEN A TRAIN IS NOT INVOLVED.
M-89-079	CAA	11/21/90	THE NTSB RECOMMENDS THAT THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL OCEAN SERVICE: INCLUDE ON STRUCTURES TABLES AND CHARTS THE PRECAUTION ON BRIDGE AND CABLE CLEARANCES CURRENTLY CONTAINED IN THE GENERAL INFORMATION SECTION OF THE COAST PILOT PUBLICATIONS SO THAT SUCH CAUTIONARY INFORMATION IS READILY AVAILABLE TO THE MARINER WHILE NAVIGATING.
M-89-080	CR	03/06/95	THE NTSB RECOMMENDS THAT THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL OCEAN SERVICE: COORDINATE WITH THE U.S. COAST GUARD TO INCORPORATE ON NATIONAL OCEAN SURVEY NAUTICAL CHARTS THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE OVER U.S. NAVIGABLE WATERS: THE VERTICAL HEIGHT FROM THE WATER LEVEL DATUM AT THE BRIDGE TO THE POINT WHERE A BASCULE BRIDGELEAF BEGINS TO PROTRUDE OVER DRAW FENDERS OR THE EDGE OF THE CHANNEL, AND THE VERTICAL HEIGHT FROM THE DATUM TO THE FULLY OPEN END OF THE BASCULE BRIDGELEAF.
M-89-081	CR	12/08/92	THE NTSB RECOMMENDS THAT THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL OCEAN SERVICE: COORDINATE WITH THE U.S. COAST GUARD TO INCORPORATE ON NATIONAL OCEAN SURVEY NAUTICAL CHARTS THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE OVER U.S. NAVIGABLE WATERS: THE EXTENT OF HORIZONTAL CHANNEL CLEARANCE OVER WHICH FULL SKYWARD CLEARANCE IS AVAILABLE FROM THE RAISED END OF THE FULLY OPEN BASCULE BRIDGELEAF(S).
M-89-082	CR	03/06/95	THE NTSB RECOMMENDS THAT THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL OCEAN SERVICE: COORDINATE WITH THE U.S. COAST GUARD TO INCORPORATE ON NATIONAL OCEAN SURVEY NAUTICAL CHARTS THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE OVER U.S. NAVIGABLE WATERS: THE ANGLE OF BASCULE BRIDGELEAFS WHEN IN THE FULLY OPEN POSITION.
M-89-083	CR	03/06/95	THE NTSB RECOMMENDS THAT THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL OCEAN SERVICE: COORDINATE WITH THE U.S. COAST GUARD TO INCORPORATE ON NATIONAL OCEAN SURVEY NAUTICAL CHARTS THE FOLLOWING INFORMATION CONCERNING EACH BASCULE BRIDGE OVER U.S. NAVIGABLE WATERS: DEPICTIONS SHOWING WHETHER A BASCULE BRIDGE OVER A NAVIGABLE WATERWAY IS SINGLE- OR DOUBLE-LEAF AND, IF SINGLE-LEAF, ON WHICH SIDE OF THE WATERWAY THE BASE PIVOT POINT OF THE LEAF IS LOCATED.



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M-89-084	CR	03/04/93	THE NTSB RECOMMENDS THAT THE U.S. ARMY, CORPS OF ENGINEERS: COORDINATE WITH THE U.S. COAST GUARD TO INCORPORATE ON CORPS OF ENGINEERS CHARTS THE FOLLOWING ADDITIONAL INFORMATION CONCERNING EACH BASCULE BRIDGE OVER U.S. NAVIGABLE WATERS: THE VERTICAL HEIGHT FROM THE WATER LEVEL DATUM AT THE BRIDGE TO THE POINT WHERE A BASCULE BRIDGELEAF BEGINS TO PROTRUDE OVER DRAW FENDERS OR THE EDGE OF THE CHANNEL, AND THE VERTICAL HEIGHT FROM THE DATUM TO END OF THE BASCULE BRIDGE LEAF.
M-94-010	CAA	02/04/02	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD, AS THE FEDERAL AGENCY RESPONSIBLE FOR NAVIGATION SAFETY: COORDINATE A COOPERATIVE EFFORT WITH THE UNITED STATES ARMY CORPS OF ENGINEERS, THE BOARD OF COMMISSIONERS OF THE PORT OF NEW ORLEANS, AND BRIDGE OWNERS TO REVIEW CONDITIONS AND PRACTICES IN THE INNER HARBOR NAVIGATION CANAL, IDENTIFY HAZARDS TO THE SAFE TRANSIT OF VESSELS THROUGH THE CANAL AND LOCK SYSTEM, AND IMPLEMENT MEASURES TO REDUCE THOSE HAZARDS.
M-94-012	CAA	08/11/00	THE NTSB RECOMMENDS THAT THE U.S. ARMY CORPS OF ENGINEERS: COOPERATE WITH THE U.S. COAST GUARD TO REVIEW CONDITIONS AND PRACTICES IN THE INNER HARBOR NAVIGATION CANAL, IDENTIFY HAZARDS TO THE SAFE TRANSIT OF VESSELS THROUGH THE CANAL AND LOCK SYSTEM, AND IMPLEMENT MEASURES TO REDUCE THOSE HAZARDS.
M-94-013	CAA	07/14/00	THE NTSB RECOMMENDS THAT THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT: COOPERATE WITH THE U.S. COAST GUARD TO REVIEW CONDITIONS AND PRACTICES IN THE INNER HARBOR NAVIGATION CANAL, IDENTIFY HAZARDS TO THE SAFE TRANSIT OF VESSELS THROUGH THE CANAL AND LOCK SYSTEM, AND IMPLEMENT MEASURES TO REDUCE THOSE HAZARDS.
M-94-014	CAA	09/07/00	THE NTSB RECOMMENDS THAT THE BOARD OF COMMISSIONERS OF THE PORT OF NEW ORLEANS: COOPERATE WITH THE U.S. COAST GUARD TO REVIEW CONDITIONS AND PRACTICES IN THE INNER HARBOR NAVIGATION CANAL, IDENTIFY HAZARDS TO THE SAFE TRANSIT OF VESSEL THROUGH THE CANAL AND LOCK SYSTEM. AND IMPLEMENT MEASURES TO REDUCE THOSE HAZARDS.
M-94-037	CAA	07/25/01	THE NTSB RECOMMENDS THAT THE U.S. COAST GUARD: REQUIRE THAT ALL BRIDGES VULNERABLE TO IMPACT BY COMMERICAL MARINE TRAFFIC BEAR UNIQUE, READILY VISIBLE MARKINGS SO THAT WATERWAY AND BRIDGE USERS ARE BETTER ABLE TO IDENTIFY BRIDGES INVOLVED IN AN ACCIDENT WHEN THEY REPORT SUCH ACCIDENTS TO EMERGENCY RESPONDERS.
R-94-009	CAA	12/03/96	THE NTSB RECOMMENDS THAT THE ASSOCIATION OF AMERICAN RAILROADS: IMMEDIATELY BEGIN TO COLLECT DATA ON VESSEL COLLISIONS WITH RAILROAD BRIDGES FROM YOUR MEMBERS AND, IF APPROPRIATE, TAKE STEPS TO INCREASE PROTECTION FOR BRIDGES IDENTIFIED AS VULNERABLE.



Recommendation #	Overall Status	Date Closed	Subject
R-94-010	CAA	12/03/96	THE NTSB RECOMMENDS THAT THE ASSOCIATION OF AMERICAN RAILROADS: COOPERATE WITH THE U.S. DEPARTMENT OF TRANSPORTATION IN DEVELOPING A NATIONAL RISK ASSESSMENT PROGRAM FOR RAILROAD BRIDGES.
R-94-011	CAA	03/27/95	THE NTSB RECOMMENDS THAT THE AMERICAN SHORT LINE RAILROAD ASSOCIATION: IMMEDIATELY BEGIN TO COLLECT DATA ON VESSEL COLLISIONS WITH RAILROAD BRIDGES FROM YOUR MEMBERS AND, IF APPROPRIATE, TAKE STEPS TO INCREASE PROTECTION FOR BRIDGES IDENTIFIED AS VULNERABLE.
R-94-012	CAA	03/27/95	THE NTSB RECOMMENDS THAT THE AMERICAN SHORT LINE RAILROAD ASSOCIATION: COOPERATE WITH THE U.S. DEPARTMENT OF TRANSPORTATION IN DEVELOPING A NATIONAL RISK ASSESSMENT PROGRAM FOR RAILROAD BRIDGES.

Total Number of Recommendations for Recommendation Subjects Report: 67