



U.S. Department of
Transportation

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News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

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M-49

D 7501 002

FOR RELEASE TUESDAY
January 29, 1991

FRA 01-91
Contact: Claire H. Austin
Tel.: (202) 366-0881

FRA PROPOSES RULE TO PROTECT WORKERS ON RAILROAD BRIDGES

The Federal Railroad Administration (FRA) has issued a proposed rule to set safety standards for the protection of workers on railroad bridges.

The proposed rule would set standards for the maintenance and use of lifelines, lanyards, safety belts, life boats and preservers, respiratory protection, and head, face and eye protection. Employers would be required to provide and maintain such equipment and train bridge workers on their proper use.

FRA Administrator Gil Carmichael said, "This comprehensive regulatory proposal will help us to achieve a safe work environment for all rail employees -- a goal shared by FRA, the railroad industry and rail labor."

The Rail Safety Improvement Act of 1988 directed FRA to issue regulations that address safety hazards confronting such employees. The Notice of Proposed Rulemaking will be published in tomorrow's Federal Register. The proposal generally follows the rules of the Occupational Safety and Health Administration (OSHA), with minor changes to reflect the railroad environment.

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U.S. Department of
Transportation

News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR RELEASE FRIDAY
April 12, 1991

FRA 02-91
Contact: Claire Austin
Tel.: (202) 366-0881

FEDERAL RAILROAD ADMINISTRATION HONORED FOR FIRST PRIZE PAPER

Federal Railroad Administrator Gil Carmichael has been honored for submitting a first prize paper at the XVIII Pan American Railway Congress held in Rio de Janeiro last September.

Brazilian Ambassador Marcilo Marques Moreira presented Carmichael with the top medal at the Brazilian Embassy in an April 10 ceremony. Carmichael's paper, "The Role of the Externalities in Railroad and Transportation Policy During the 21st Century," won the Founder's Award which was established in 1907.

Ambassador Moreira said it was an honor to present the medal to the United States as a first time recipient of the award and noted that Carmichael had made a significant contribution with his paper, which advances the railroad industry as the most modern, efficient and economic mode of transportation.

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U.S. Department of
Transportation

News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Wednesday, May 1, 1991

FRA 03-91
Contact: Claire Austin
Tel.: (202) 366-0881

FRA ANNOUNCES 1990 DRUG, ALCOHOL TESTING RESULTS

The Department of Transportation's Federal Railroad Administration (FRA) today announced that drug and alcohol testing in the railroad industry showed the lowest positive rate since the agency began the testing program in 1986 and that a random testing program for illegal drugs has now been fully implemented.

In mandatory post-accident testing, 3.2 percent of the employees tested positive for prohibited use of alcohol or drugs, down from 6 percent in 1988. In reasonable cause testing, 2.2 percent of employees tested positive for alcohol or drugs, down from 5.4 percent in 1988. Reports on random testing for drugs for the 1990 testing period indicate a positive rate slightly above 1 percent, based on more than 35,000 tests.

"This is encouraging news," said FRA Administrator Gil Carmichael. "We are pleased that there is continued progress toward our goal -- a rail system free from the potential danger and human tragedy caused by drug and alcohol use. Much of the credit for this success goes to the men and women in railroading who refuse to tolerate coworkers who use drugs and alcohol on the job."

Railroads began random testing programs for illegal drugs on a phase-in basis in January 1990, as required by the DOT drug testing rule. Railroads now conducting required random testing of urine for drugs include 24 Class I and passenger carriers, 21 Class II railroads and 131 Class III railroads.

FRA rules also require the collection of blood and urine samples following certain major train accidents, collisions and employee fatalities. Samples are analyzed for alcohol and controlled substances at an FRA contract laboratory. In addition, FRA requires pre-employment, certain return-to-duty and follow-up drug testing and authorizes the railroads to conduct "reasonable cause" drug and alcohol testing.

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I.

SUMMARY OF RAILROAD MANDATORY POST-ACCIDENT TESTING

	1986	1987	1988	1989	1990	CUMULATIVE
QUALIFYING EVENTS	170	179	178	161	149	837
Employees tested:	738	770	682	607	824	3,321
Positive findings:						
Alcohol	7 (0.9%)	3 (0.4%)	3 (0.4%)	6 (1.0%)	1 (0.2%)	20 (0.6%)
Controlled substances/ prohibited use	27 (3.7%)	39 (5.1%)	38 (5.6%)	18 (3.0%)	16 (3.0%)	138 (4.2%)
SUBTOTAL	34 (4.6%)	42 (5.5%)	41 (6.0%)	24 (4.0%)	17 (3.2%)	158 (5.0%)
Controlled substances/ medical use	8 (1.1%)	4 (0.5%)	0 (0.0%)	4 (0.7%)	3 (0.6%)	19 (0.6%)
TOTAL	42 (5.7%)	46 (6.0%)	41 (6.0%)	28 (4.7%)	20 (3.8%)	177 (5.3%)

Prohibited drug use by substance:

Marijuana	16	30	25	9	11	91
Cocaine	5	6	8	8	0	28
Marijuana & cocaine	5	1	2	1	0	9
Other	0	2	3	0	5	10

Note: All numbers may not add exactly because of rounding.

II.

RAILROAD RANDOM DRUG TESTING RESULTS

1990

Number of urine tests:	35,228
o Number of urine tests positive:	365
o Percentage of urine tests positive:	1.04

Substances in positive urine:

o Marijuana.....	175
o amphetamines.....	0
o cocaine.....	194
o opiates.....	10
o phencyclidine.....	2

Total: 381

U.S. Department
of Transportation
**Federal Railroad
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

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News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Tuesday, May 7, 1991

FRA 04-91
Contact: Claire Austin
Tel.: (202) 366-0881

FRA ANNOUNCES PROPOSAL TO IMPLEMENT RAILROAD USER FEE PROGRAM

The Federal Railroad Administration (FRA) today proposed rulemaking that would implement the railroad user fee program mandated by Congress in the omnibus Budget Reconciliation Act of 1990.

The Reconciliation Act required the Department of Transportation to establish a schedule of annual fees to be paid by the nation's railroads to cover the costs incurred by the FRA in administering the Federal Railroad Safety Act of 1970.

The notice of proposed rulemaking (NPRM) addresses a variety of issues related to the user fee program, including railroad carriers to be covered, a description of the assessment criteria to be used and the FRA costs that are to be reimbursed. Such costs include preparation and enforcement of safety regulations.

FRA invites public comment on the proposal and will hold a public hearing at 10 a.m. on June 12, 1991 in Room 2230 of DOT's Headquarters Building, 400 Seventh Street, S.W., Washington, D.C.

Information from comments will be used by the FRA in preparing a report to the Congress analyzing the impact of the fees on the financial health of the railroad industry and on the industry's competitive position relative to other modes of transportation.

Persons who want to make oral statements at the public hearing should notify the FRA at least five days prior to the hearing by writing to the Docket Clerk (RCC-30), Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Washington, D.C. 20590, or by calling (202) 366-2257. Written comments should also be submitted to the Docket Clerk by June 12, 1991.

The NPRM is published in today's edition of the Federal Register. Copies of the NPRM are available from the FRA Docket Clerk.

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News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

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FOR IMMEDIATE RELEASE
Wednesday, May 29, 1991

FRA 05-91
Contact: Claire Austin
Tel.: (202) 366-0881

SECRETARY SKINNER HONORS LOCOMOTIVE CONDUCTOR

Secretary of Transportation Samuel K. Skinner today presented the Bronze Medal of Honor for Lifesaving to Anthony Falzo, a freight conductor for the Consolidated Rail Corp., who saved the lives of two boys.

The medal recognizes heroism in connection with transportation emergencies or accidents. The award is made on behalf of the President of the United States.

Falzo, of Bloomfield, N.J., saved the lives of Todd and Scott Pritchard, who were playing on Conrail tracks near their home in Ramsey, N.J., on May 2, 1989. As the train's engineer applied the emergency brakes, Falzo leaped from the locomotive, pulled the children out of the path of the train wheels and covered them with his body.

The secretary described Falzo's act of heroism as "in keeping with the finest traditions of the dedicated professionals who operate the nation's transportation system."

Skinner said, "Anthony, you are truly a hero and I am extremely pleased to bestow upon you this Medal of Honor on behalf of President Bush."

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FOR IMMEDIATE RELEASE
Wednesday, June 12, 1991

FRA 06-91
Contact: Claire Austin
Tel.: (202) 366-0881

DOT RULE REQUIRES CERTIFICATION OF ALL RAILROAD ENGINEERS

The U.S. Department of Transportation's Federal Railroad Administration (FRA) today issued a final rule that requires railroads to evaluate and certify the competency of prospective locomotive operators. The rulemaking, required by the Rail Safety Improvement Act of 1988, is in direct response to the 1987 Amtrak-Conrail accident at Chase, Md.

Under the rule, railroad carriers are prohibited from requiring or permitting anyone without a certificate to operate a locomotive. To be certified, each prospective operator must pass a written exam and a performance skills test. The railroad also must review the person's motor vehicle record and previous railroad experience as well as determine that the prospective employee has the necessary hearing and visual acuity to operate a train.

FRA Administrator Gil Carmichael said, "We must assure that all locomotive engineers are fully qualified for this important responsibility. This rule is another milestone in FRA's long-term program to improve railroad safety."

Nearly 500 railroads and 34,000 locomotive engineers will be affected by the rule, which will become effective 90 days after publication in the Federal Register. Railroads must begin compliance, on a phase-in basis, by Jan. 1, 1992.

Certifications must be renewed every three years. Railroads also are required to conduct both overt and covert periodic monitoring of locomotive engineers' safety performance, in addition to a formal annual evaluation. In addition, railroads must establish initial and continuing train safety education programs. Currently-employed operators will be "grandfathered" for three years.

The rule also establishes procedures for review where certification is denied. Such reviews are to be conducted promptly by the FRA. Provision is made for further appeals before a hearing officer and to the FRA administrator, if necessary.

Certain unsafe practices by train operators, such as excessive speeding, which are not currently covered by specific regulation, will now be subject to civil penalty and disqualification procedures.

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Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

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FOR IMMEDIATE RELEASE
Thursday, June 13, 1991

FRA 07-91
Contact: Claire Austin
Tel.: (202) 366-0881

FRA PROPOSES REQUIREMENTS FOR EVENT RECORDERS ON TRAINS

The Department of Transportation's Federal Railroad Administration (FRA) moved today to enhance accident investigations by proposing a rule that would require electronic event recorders on all passenger trains and on freight trains that travel faster than 30 mph and carry 50 or more cars.

Within 24 months, all new and rebuilt locomotives also would have to be equipped with the recording devices, much like the black box devices found on commercial planes.

An event recorder is a device that records the train's speed, positions of key controls such as the throttle and the brake levers, and the time and distance traveled. Magnetic tape is the recording medium used in most boxes today, but FRA has proposed a performance standard that would allow railroads to take advantage of advances in technology.

FRA Administrator Gil Carmichael stated, "We anticipate that these recorders will be a tremendous asset to federal accident investigators. Skilled technicians can use recorder data to recreate the history of a locomotive's last 48 hours of operation and provide an electronic picture of the entire trip leading up to a derailment."

FRA expects to achieve rapid coverage by focusing first on a requirement that all passenger and fast, heavy freight trains have event recorders. More than 70 percent of all road locomotives on the nation's major railroads are now equipped with some form of event recorder.

All Amtrak intercity trains are now pulled by locomotives equipped with recorders. The FRA rule would extend this coverage to all commuter railroads operating under the agency's jurisdiction.

FRA's proposal would require that recorders be inspected at quarterly intervals and maintained according to the standards of their manufacturers, suppliers or owners.

Anyone who tampers with a recorder could be subject to civil penalties or disqualification from safety-sensitive functions in the railroad industry.

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FOR IMMEDIATE RELEASE

Monday, July 1, 1991

FRA 09-91

Contact: Claire Austin

Tel.: (202) 366-0881

**GRADY C. COTHEN JR. NAMED FRA
ASSOCIATE ADMINISTRATOR FOR SAFETY**

Federal Railroad Administrator Gil Carmichael has announced the appointment of Grady C. Cothen Jr. as Associate Administrator for Safety for the Federal Railroad Administration (FRA).

Cothen will serve as the agency's top safety executive and will be responsible for increasing the level of safety on the nation's railroads through a variety of inspection, education, research and development and public awareness programs.

"Grady Cothen has extensive experience and his knowledge of FRA issues makes him uniquely qualified to assume this key post on my management team," Carmichael said.

Prior to accepting the position, Cothen was a Special Assistant to the Chief Counsel of FRA for more than 10 years, where he specialized in the department's extensive drug-alcohol testing programs, which withstood legal challenges all the way to the U.S. Supreme Court.

From 1986 to 1988, he served as the FRA Acting Associate Administrator for Policy. Cothen also held a trial attorney position with FRA from 1976-1980. He has received several meritorious and superior achievement awards for his outstanding contributions to the Department of Transportation agency.

Cothen received his bachelor's degree from Oklahoma Baptist University in 1968 and a law degree from Georgetown University in 1975.

Cothen and his wife, Leila, reside in Cheverly, Md., with their two children, Elizabeth and Will.

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FOR RELEASE MONDAY
July 22, 1991

FRA 10-91
Contact: Claire Austin
Tel.: (202) 366-0881

FRA ISSUES GRADE CROSSING RULE

The U.S. Department of Transportation's Federal Railroad Administration (FRA) today issued a final rule that requires railroads to report instances of grade crossing signal system failures.

Under the rule, railroads are also required for the first time to file with FRA copies of their standards governing the maintenance, inspection and testing of their grade crossing signal systems. They are also required to file a one-time report detailing the type of circuit at each grade crossing.

FRA Administrator Gil Carmichael said, "Information submitted by railroads as a result of this rule will enable FRA to determine the most appropriate grade signal system regulations. This rule is an important step toward prevention of highway traffic accidents at grade crossings and improvement of safety in these areas."

Carmichael also noted that FRA has under consideration another rule that would require a railroad to take prompt, specific action in response to a grade crossing signal malfunction.

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News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Friday, July 26, 1991

FRA 11-91
Contact: Claire Austin
Tel.: (202) 366-0881

FLORIDA RAILROAD DIRECTED TO RESUME TRAIN WHISTLES IN NIGHTTIME CROSSINGS

The Federal Railroad Administration (FRA) today issued an emergency order that requires the Florida East Coast Railway Co. to resume sounding train whistles after 10 p.m. at highway-rail crossings in Florida.

Since 1984, a number of Florida localities concerned about noise passed ordinances prohibiting the sounding of train whistles at night.

According to a recent FRA study, there has been "an alarming increase" in grade crossing accidents at the more than 500 highway-rail crossings subject to Florida nighttime whistle bans.

Accident and fatality data from 1990 and the first half of 1991 show that nighttime accidents at these Florida crossings have nearly tripled, a 195 percent increase, since the bans were imposed in July 1984 through December 1989, compared to a 23 percent increase at the railroad's crossings not affected by the whistle bans.

FRA Administrator Gil Carmichael said, "We are making a major effort to reduce collisions at highway-rail crossings. They present significant risk to members of the public and to motorists, as well as to railroad employees. Although we are studying this issue on a national level, it is imperative that we take action to reduce the disturbing trend in Florida."

The emergency order, which is effective immediately, applies only to the crossings and operations of the Florida East Coast Railway Co., the owner and sole operator of the tracks that run from Jacksonville to south of Miami. FRA is now considering rulemaking to address whistle bans nationwide.

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U.S. Department of
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News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Thursday, August 29, 1991

FRA 12-91
Contact: Claire Austin
Tel.: (202) 366-0881

MAGLEV EVALUATION STUDIES INITIATED

Federal Railroad Administrator Gil Carmichael and Assistant Secretary of the Army (Civil Works) Nancy P. Dorn today announced the first step toward evaluation of the potential for magnetically levitated high speed ground transportation (maglev) systems in the U.S.

Twenty-seven contracts totaling \$4.3 million have been awarded by the National Maglev Initiative (NMI) to define opportunities for technological improvements in key aspects of maglev transportation. Among the issues to be studied are the use of existing highway and railroad right-of-way, improving superconducting magnets, and safety and health issues associated with electro-magnetic fields.

The NMI is an interagency partnership led by the Federal Railroad Administration and the Army Corps of Engineers, with support from the Department of Energy, the Environmental Protection Agency and other federal agencies. NMI was formed to work with the private sector and state governments to assess the role of maglev in the nation's transportation future.

Maglev systems allow vehicles supported, guided and propelled by magnetic forces to glide above a guideway at speeds that can exceed 300 miles per hour. Future maglev systems could complement the existing transportation infrastructure and help meet transportation demands in ways that are both energy efficient and environmentally sound.

Maglev research may also offer opportunities for technology spin-offs to other industries -- notably in the areas of electronics, superconducting materials, aerospace and construction technologies.

The studies funded by these contracts will explore innovative approaches to resolving performance issues and seek to determine areas where United States expertise in science and industry can lead to major advancements in maglev technology.

Contracts have been awarded to a wide range of private sector entities, including major aerospace companies, small entrepreneurial firms and universities. A list of the projects and contractors is attached.

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Technology Assessments
Awarded Under the National Maglev Initiative

Company	City	State	Title	Description	Total Cost to FRA (\$)
Babcock & Wilcox	Washington	DC	Guideway Sensor Systems	SCOPE: Investigate the use of various types of sensors for guideway diagnostics and control systems to monitor the guideway, including guideway integrity, obstacles, snow, ice, and location and speed of vehicles.	181,802
Battelle	Columbus	OH	Evaluation of Concepts for Safe Speed Enforcement	SCOPE: Investigate speed control systems using a three point approach: identify speed control system needs, survey existing speed control options, and determine the applicability of those systems. The final product will define what research and development, if any, is needed for the US maglev effort.	66,502
Charles Stark Draper Lab, Inc.	Cambridge	MA	Comparison of Major Parameters in Electrodynamic and Electromagnetic Levitation Transport Systems	SCOPE: Generate design parameters for electrodynamic and electromagnetic systems. Results will contribute to a first order evaluation of viable magnetic levitation systems.	178,000
Charles Stark Draper Lab, Inc.	Cambridge	MA	Aerodynamic Forces on Maglev Vehicles	SCOPE: Evaluate aerodynamic forces to determine the relationship between vehicle shape and drag, determine potential for reducing energy per passenger, quantify ride quality improvements through use of aerodynamic control devices and quantify energy penalty for use of aerodynamic control devices.	139,150
Charles Stark Draper Lab, Inc.	Cambridge	MA	Verification Methodology for Fault Tolerant, Fail Safe Computers Applied to Maglev Control Systems	SCOPE: Develop a methodology for verification of fault-tolerant and fail safe computer control systems.	169,900
Council on Superconductivity	Washington	DC	Guideway Structural Design (2.1) and Power/Propulsion/Braking in Relation to the Guideway (2.2)	SCOPE: Evaluate cost, performance characteristics, and fabrication techniques for Maglev power, propulsion, and braking designs and their effects in relation to the guideway. Several guideway designs will be evaluated for relationships among guideway	420,265

Technology Assessments
Awarded Under the National Maglev Initiative

Company	City	State	Title	Description	Total Cost to FRA (\$)
				construction costs, fabrication techniques and support systems. Develop the construction cost estimate for a complete Maglev guideway system capable of speeds up to 300mph.	
Electric Research & Management, Inc	State College	PA	Follow-On Analysis of Magnetic Flux Density Measurements.	SCOPE: Complete the analysis of magnetic flux density data for the TRANSRAPID, and do similar analyses for additional guided ground transportation systems.	381,589
Electric Research & Management, Inc	State College	PA	Sample Measurements of Magnetic Fields on Existing Transportation Systems	SCOPE: Use portable multiwave instruments to measure the electromagnetic fields of existing transportation systems which will then be compared to the fields generated by a maglev system.	
Foster-Miller, Inc.	Waltham	MA	Power Transfer to High Speed Vehicles	SCOPE: Develop a two phase plan to analytically and experimentally investigate and assess methods of reliably transferring high power to/from a Maglev vehicle travelling at high and low speeds.	96,287
Foster-Miller, Inc.	Waltham	MA	Thermal Effects and Mitigation Methods for Continuous Sheet Guideways	SCOPE: Identify thermal problems in continuous sheet guideways and primary support structures which effect smooth vehicle operation and cause buckling, fracture, and fatigue failures due to thermal cycles in the service life of the structure. Select/develop necessary analytical structural tools for quantification of thermal effects in typical continuous guideway and support structures to facilitate design optimization of structures. Prepare a design data base for use by future structural designers.	79,039
Foster-Miller, Inc.	Waltham	MA	Advanced Low Cost High Performance Guideway Concepts	SCOPE: Identify and quantify key guideway design drivers for a US system. Develop concepts for alternate guideway structural configurations and advanced fabrication methods which yield high performance and low cost, and prepare structural and cost analyses of candidate configurations.	122,612

Technology Assessments
Awarded Under the National Maglev Initiative

Company	City	State	Title	Description	Total Cost to FRA (\$)
General Atomics	San Diego	CA	Adaptive Suspension Using ER-Fluid Dampers	SCOPE: Investigate the application of electrorheological (ER) fluids to a secondary suspension system which may be operated in an adaptive method to relieve tolerances on guideway irregularities.	182,881
General Atomics	San Diego	CA	Advanced Power Conditioning for Maglev Systems	SCOPE: Assess power conversion unit (PCU) performance characteristics attainable with today's technology, recommend optimum candidates for Maglev application, and prepare parametric design data. Perform design optimization studies and recommend design concepts.	124,259
General Electric Company	Schenectady	NY	Novel Cryogen-Free, Actively Shielded Superconducting Magnets for Maglev Vehicles	SCOPE: Develop the preliminary design of a superconducting magnet system for Maglev applications that increases the reliability and safety of the magnet systems by eliminating the need for liquid helium cooling and incorporating alternate shielding approaches.	200,391
Harris Miller Miller & Hanson, Inc.	Lexington	MA	Noise from High Speed Maglev Systems	SCOPE: Define noise sources, develop criteria, establish design guidelines, and recommend testing facility requirements to minimize environmental noise.	92,256
Intermagnetics General	Guilderland	NY	Superconducting Linear Induction Motor (SLIM)	SCOPE: Evaluate the technical and economic feasibility of using Superconducting Linear Induction Motors (SLIM) to provide propulsion and, if feasible, provide a conceptual design for a SLIM and estimate cost and operating characteristics.	136,487
Kaman Science Corporation	Albuquerque	NM	Parametric Studies of Suspension and Propulsion Subsystems in a Maglev Transportation System	SCOPE OBJECTIVES: 1) Provide tools for performing a trade-off study of subsystem performance for various parameter values; 2) Apply the tools to a detailed parametric study of performance of a combined suspension and propulsion subsystem and a combined suspension subsystem using	99,304

Technology Assessments
Awarded Under the National Maglev Initiative

Company	City	State	Title	Description	Total Cost to FRA (\$)
				both permanent magnets and electromagnets; 3) Develop passive or active shielding schemes to reduce level of magnetic fields in passenger and electronics compartments.	
MIT	Cambridge	MA	Low Cost Guideways for Maglev	SCOPE: Study wide gap EDS systems with active guideway LSM propulsion, develop recommendations for a national standard guideway design, define the relationship between guideway construction costs, dimensional tolerances, span deflections, span lengths, vehicle size and weight and guideway life expectancy, recommend cost reduction methods, evaluate cost effectiveness of remote alignment capability, and predict guideway dynamic behavior.	112,925
MIT	Cambridge	MA	Low Cost LSM Propulsion Systems for Maglev	SCOPE: To establish a data base for the design specifications of a linear synchronous motor including cost, life expectancy, and parameters.	119,691
MIT	Cambridge	MA	Magnetic Levitation Suspension-Guideway Interaction	SCOPE: Develop a generic vehicle guideway interaction model capable of assessing guideway stiffnesses and irregularities with respect to vehicle suspension performance and ride quality.	88,693
MIT Plasma Fusion Center	Cambridge	MA	Application of Cable-In-Conduit-Conductors (CICC) to Maglev Systems	SCOPE: Illustrate that superconducting cable in conduit conductors are superior to bath-cooled systems.	141,599
Martin Marietta	Denver	CO	Maglev Program Test Plan	SCOPE: Identify the test facility requirements needed for the development of maglev program components, subsystems, and systems. Also identify high risk elements which would require special testing.	137,267
Martin Marietta Info. Systems Group	Washington	DC	Maglev Guideway Route Alignment and Right-of-Way Requirements	SCOPE: Perform a cost/benefit analysis of operational considerations as they relate to route alignment and siting considerations for 23 city pairs.	203,712

Technology Assessments
Awarded Under the National Maglev Initiative

Company	City	State	Title	Description	Total Cost to FRA (\$)
Martin Marietta Info. Systems Group	Washington	DC	Maglev Guideway and Route Integrity Requirements	SCOPE: Develop a three task approach to define maglev guideway and route integrity requirements: identify risks, assess current mitigation technology with an emphasis on active sensors, and summarize the communication and sensor architecture required.	165,718
Parsons Brinckerhoff, Inc.	Herndon	VA	Influence of Guideway Flexibility on Maglev Vehicle/Guideway Dynamic Forces	SCOPE: Develop realistic computer simulation models of the interaction between flexible guideways and maglev vehicles. Evaluate the results against objective standards relating to structures, ride quality, and noise and vibrations.	158,272
Parsons Brinckerhoff, Inc.	Atlanta	GA	Maglev-Rail Intermodal Equipment & Suspension	SCOPE: Investigate and identify the right of way access envelope to large cities and investigate the viability of piggybacking maglev into urban centers via rail.	138,577
University of Washington	Seattle	WA	Design Assessment of Alternate Feeder Systems for Maglev Inermodal Stations	SCOPE: Develop a computer package to design maglev feeder routes. Also develop preliminary designs for intermodal stations. Note, a change will be proposed to reduce their scope of work to concentrate on the intermodal stations only.	81,689
West Virginia University	Morgantown	WV	State-of-the-Art Assessment of Guideway Systems for Maglev Applications	SCOPE: Examine the designs of existing high-speed guideway systems and proposed maglev guideways which use structural steel and steel-reinforced structural concrete as their major load bearing members. Also investigate the impact of electromagnetic fields on the structural steel and possible interference with control systems. Examine the potential for use of innovative non-conductive materials in place of steel, and determine the limitations and costs of these materials.	249,809



U.S. Department of
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News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Thursday, October 31, 1991

FRA 14-91
Contact: Claire Austin
Tel.: (202) 366-0881

CONTRACTS AWARDED TO DEVELOP MAGLEV SYSTEM CONCEPTS

Federal Railroad Administrator Gil Carmichael and Assistant Secretary of the Army (Civil Works) Nancy P. Dorn today announced the award of four contracts totaling \$8.6 million to develop potential concepts for a magnetically levitated high speed ground transportation (maglev) system in the U.S.

Maglev systems allow vehicles supported, guided and propelled by magnetic forces to glide above a guideway at speeds that can exceed 300 mph. Each of these concept studies will combine various components -- the vehicle, guideway, levitation, suspension, propulsion, braking and control -- into a complete transportation system.

The results of these concept studies will be central to assessing the potential of maglev in the nation's transportation future.

The 11-month contracts for four maglev system concepts have been awarded by the National Maglev Initiative (NMI), an interagency partnership, to the following industry teams:

Bechtel (San Francisco, Calif.); with Hughes Aircraft; EMD division of General Motors; Massachusetts Institute of Technology (MIT); and Draper Lab; to feature repulsive superconducting levitation and a box beam girder guideway. \$1,769,776.

Foster-Miller, Inc. (Waltham, Mass.); with DeLeuw Cather; Boeing Aerospace and Electronics; Morrison Knudsen; Bombardier; General Dynamics; General Atomics; and AYA & Associates; to feature repulsive superconducting levitation and integration of lift, guidance, and propulsion functions. \$1,712,582.

Magneplane International (Wayland, Mass.); with MIT Plasma Fusion Center; MIT Lincoln Labs; Raytheon; Bromwell and Carrier; Failure Analysis Associates; and Koch Process Systems; to feature repulsive superconducting magnets with a semi-circular guideway which permits self-banking. \$2,676,610.

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Grumman Corp. (Bethpage, Long Island, N.Y.); with Parsons Brinckerhoff Inc.; Gibbs & Hill; Battelle Labs; Intermagnetics General; and N.Y. State University at Buffalo; to feature attractive levitation using superconducting magnets and V-shaped guideway. \$2,474,108.

Management of the studies will be shared by the Federal Railroad Administration (FRA), an agency of the Department of Transportation, and the U.S. Army Corps of Engineers. Each study will assess technical feasibility, performance, capital, operating, and maintenance costs for a system that could be available around the year 2000.

As the system concepts are further developed, they will also be evaluated in separate economic studies for their relative economic and market performance in 20 to 25 major U.S. transportation corridors.

The NMI interagency partnership is led by the FRA and the Army Corps of Engineers, with support from the Department of Energy, the Environmental Protection Agency, and other federal agencies. The partnership was formed to work with the private sector and state governments to assess the role of maglev in transportation.

Future maglev systems could complement existing transportation systems, particularly in congested high-density corridors, in ways that are energy-efficient and environmentally sound.

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