

NARP FIGHT TO STOP LEWIS INTENSIFIES

Original plans for BART called for a fully automated system requiring no on-board train operator. This has not worked out because of a series of malfunctions in the ATC system. Costly patch-up work, with substantial federal help, is underway, but complete automation of BART now appears out of the question. In light of the BART experience we should be alert to see to it that the same expensive mistakes are not made in other federally supported urban transit projects involving Automated Train Control.

—U.S. Senators Robert Byrd and Clifford Case. Byrd is chairman of the Transportation Appropriations Subcommittee and Case is ranking minority member.

Amtrak Needs Modern Railroad Repair and Maintenance Shop

(Editorial)

As railroad passengers riding broken-down equipment, we would like to see the following ad placed in a railroad trade journal: "Seeking to lease or purchase modern railroad repair shop. Contact Amtrak Procurement Dept., Washington, D.C."

The single most important immediate goal for Amtrak to attain should be modernization and standardization of its car and locomotive fleet. Also needed is proper day-to-day maintenance of this equipment.

Every day finds cars with no heat (or in summer, air conditioning), bad brakes, stuck doors, broken windows, steam leaks, stopped up toilets, plugged heat valves, broken water pipes, etc. Diners operate with gas leaks in stoves, burned-out toasters and hot refrigerators.

Some sleepers have beds that won't go down, or up. Diesels are connected to Amtrak trains with worn-out boilers and nearly burned-out traction motors.

Consequently—nearly three years after Amtrak's birth—passengers are still inconvenienced by riding trains that are cold, late and in some cases downright disgusting.

Every problem has a solution. Amtrak's present solution is to contract with individual railroads to do everything from heavy maintenance to daily cleanups on its equipment. This results in retention of expensive duplicate maintenance facilities staffed by personnel who are not necessarily gung-ho about Amtrak.

This also results in overcharges. We know of one case where an employee of a western railroad worked two hours to repair an Amtrak car. When submitting his time card for that day his supervisor said, "On this card you'll put down four hours on the Amtrak car. That's that." This employee also maintains piggy-back trucks belonging to that railroad.

And things are too disorganized. When a Burlington Northern maintenance crew in Chicago needed new wheels for Amtrak cars they with best intentions tried to "borrow" passenger wheels from the Santa Fe in Topeka. In another instance the Southern Pacific eliminated yearly inspections on certain Amtrak locomotives. When another railroad was asked to perform the inspection, the reply was "we won't do it 'cause this locomotive isn't in our pool."

Amtrak says that it is not at fault. Most of its rolling stock was built in the late 1940s and early 1950s. Many received only minimal maintenance during the decade before Amtrak. The specialization is also a headache. Reportedly, Amtrak cars carry 27 different types of generators, many of which haven't been

(continued on page three)

Nixon Announces Nomination Of New Amtrak Board Members

Almost as if the timing had been prearranged, the news of President Nixon's nominations to the new Amtrak board of directors was announced during the annual meeting of members of the National Association of Railroad Passengers.

Unfortunately, the list contained the name of Roger Lewis, present chief executive of Amtrak. Only six names were announced by the White House, although there are nine directorships to be filled.

NARP members voted unanimously (with one abstention) to oppose the continuation of Mr. Lewis as president and chief executive officer of Amtrak, and authorized Chairman Haswell to take "necessary and appropriate legal efforts" toward this end, including opposing confirmation by the Senate of Mr. Lewis as an Amtrak director. (Reasons for this position on Mr. Lewis were explained in detail in the March issue of NARP NEWS).

Mr. Haswell explained that Mr. Lewis' nomination to the Amtrak board is being opposed by NARP on the assumption that he would continue as chief executive of Amtrak. He added that NARP would not oppose Mr. Lewis for board membership if it is made "perfectly clear" that someone else will manage Amtrak.

Three consumer representatives named were: Joseph V. MacDonald of Farmingdale, N.Y., a Continental Can Co. executive who was active in the movement to establish the Amtrak Montrealer; Mary J. Head of Oklahoma City, a member of the Urban Transportation Advisory Council, and Edward L. Ullman of Seattle, Washington, a professor of geography at the University of Washington.

Two members of the former board were renamed. They are Charles Luna of Dallas, Texas, president emeritus of the United

Amtrak's two spartan French Turbo trains have performed well and will apparently be joined by eight similar trains within the next year. The 5-car trains, built by ANF-Frangeco, are expected to be used on Chicago-based routes such as St. Louis, Detroit, Carbondale and Milwaukee. The formal order will be made shortly. An order for approximately 200 cars, best described as "new-style conventional", is also expected within the next few months. Such an order would bring to 361 the total number of new cars (Turbo, Metroliner, Metroliner-type, new conventional) in the Amtrak fleet.

Transportation Union, and General Frank S. Besson Jr. of Alexandria, Va., retired from the U.S. Army.

Lewis, Luna and MacDonald were named for two year terms, Besson and Head for three year terms and Ullman for a four-year term.

Despite the fact that the Amtrak Act of 1973 calls for a bipartisan board of directors, the political affiliation of the six persons nominated was not stated in the White House announcement.

There was no indication from the White House as to when the other board members will be nominated, and no indication from the Senate as to when hearings will be held.



NATIONAL ASSOCIATION OF RAILROAD PASSENGERS

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Energy Use... Trains Vs. Other Modes

Since the energy crisis came into full bloom, NARP has had many requests for specific data on the relative energy efficiency of trans vs. other modes. Accordingly, we have culled the following data from the major available reports on energy consumption in transportation. (Also, see the story on Page Four concerning "The Gospel of Energy Conservation According to Greyhound, Boeing and Southern Pacific").

The "Average Actual Load Factors" used by Hirst ranged from 37% to 48%; those used by Rice ranged from 50% to 60%. In order to make the data more comparable, both between researchers and among modes, we have added figures based on 50% load factors for all modes except for the 1973 Rice data, which did not include seat-mile figures. SRI/SP data was for seat-miles only.

We have assumed full loads for the public carriers in commuter and transit service, for that is how they generally operate during peak periods of the day. For automobiles, we show two figures, one based on the national average of 1.4 persons per car for urban driving, and the second assuming an average of 3 persons per car as a result of carpool programs.

The Center for Advanced Computation at the University of Illinois is developing figures by a methodology that may be more sophisticated than that used in any of the reports we cite. However, the U of I data is not yet available for public distribution. Press reports indicate that it is not strictly comparable with the figures shown below.

ENERGY EFFICIENCY OF TRAINS COMPARED TO OTHER MODES

	Passenger Miles per Gallon of Fuel			
	INTERCITY TRAVEL			
	Trains	Busses*	Autos	Airplanes
<u>Hirst-1973</u>				
Av Act LF	48 All trains	85	40	16
50% LF	63 All trains	92	42	17
<u>US DOT-1973</u>				
50%LF	73 Metroliner	92	42	17
<u>Rice-1970</u>				
Av Act LF	80 All coach	125	32	21-22
	18 All sleeper			
	50 Metroliner			
50% LF	72 All coach	107	32	17-20
	15 All sleeper			
	38 Metroliner			
<u>Rice-1973</u>				
Av Act LF	65 All trains	83	35	15-20
<u>SRI/SP-1973</u>				
50% LF	37 Super Chief CH-LA	107	22-27	14-22
	44 Broadway NY-CH			
	48 Starlight LA-SF			
	72 Metroliner NY-DC			

COMMUTER AND TRANSIT SERVICE

	Trains Fully Loaded	Busses* FL LD	Autos 1.4 Ps	Autos 3 Ps
<u>Hirst-1973</u>				
	—	—	17	36
<u>Rice-1970</u>				
	200 Standard	—	—	—
	400 CNW Bi-level			
	150 NY Subway			
<u>PennDOT-1974</u>				
	162 Electric Local	240	19	41
	442 Electric XP			
<u>SRI/SP-1973</u>				
	355 SP Bi-level	230	—	—
	240 BART Electric			

*Standard diesel or gasoline busses currently in US service

So where does all this leave us as advocates of railroad passenger service? In commuter service, trains appear about as energy-efficient as busses; in "bi-level" versions, trains are considerably more efficient. Even if car-pooling caught on in a big way, mass transit of any kind would remain much more energy-efficient than private automobiles.

For intercity service, trains are somewhat less advantageous because of the need to provide more space per passenger. Nevertheless, trains in short-to-medium distance "corridor" service are well ahead of autos and airplanes, and are not too far behind busses. Long distance trains are comfortably ahead of both airplanes and of autos carrying less than three passengers. Even an all-sleeper train—considered by some to be hopelessly archaic—holds its own with its chief competitor, the airplane.

Since busses do have an advantage in energy consumption over trains on intercity runs, why should not the bus be the preferred means of attracting travellers away from autos and airplanes? The answer is that most people prefer to ride trains rather than busses, especially over longer distances, and will patronize the bus only out of economic necessity or because there is no available alternative transportation.

If busses were to become genuinely competitive with autos and airplanes, one of two things would have to be done—either add considerably more width and leg room to the seating, or provide sufficient subsidy so that bus fares could be set low enough to cancel out bus comfort deficiencies. The first approach would probably cancel out the advantage busses now have in energy efficiency. A reduction in bus fares sufficiently low enough to attract large numbers of motorists and air travelers might cost the government more in subsidies than it would be worth in energy savings.

We believe that adequate intercity bus service is just as important a part of a balanced transportation system as is train service, if for no other reason than to accommodate those who cannot afford train fares. The bus would seem to have a bright future, especially for transportation to and from rural areas; as a feeder to train and air services; and for urban and suburban transit in the many areas where rail facilities cannot be economically justified. But busses can never be a substitute for trains for commuter service in large cities; in short-to-medium distance corridors of significant population density; and over long distances in major travel markets.

One reason why the average intercity passenger train in the United States makes a mediocre showing in energy efficiency is because of obsolete and worn-out motive power. Another is that present trains weigh about three times as much per passenger as busses, autos, and planes. In the past, reduction of train weights has had a low priority because fuel costs have been a relatively small portion of total operating costs. Now that fuel will be considerably more expensive relative to other costs, weight reduction must be given greater emphasis, both in selection of materials and in equipment design. The advocates of "bi-level" and other high-capacity care configurations seem to be on the right track.

Evaluation of transportation modes in terms of energy efficiency (or of anything else) should not be confined to historical or current experience, but should include the future potential inherent in research and development. Airplanes, busses, and autos have been the beneficiaries of gigantic public and private expenditures for research and development; until quite recently, passenger trains have been condemned to a lingering death. For this reason alone, trains would appear to have more potential than any other mode for improved efficiency through technological advancement.

Finally, the energy crisis is not over, and may become more acute than ever before. The American Association for the Advancement of Science warns that "the American public is not taking this problem seriously enough" and that "before we really move decisively, it will be necessary for us to fall into an even deeper bind and crisis than we had last winter."

I'm Amtrak—Come Fly With Me (To The Tune of \$600,000)

Amtrak employees bought more than \$600,000 in airplane tickets last year despite the fact they could have traveled free on Amtrak trains, according to a memo from Amtrak controller Sydney S. Sterns to Amtrak president Roger Lewis and all vice presidents and department heads, dated March 22. The memo said the air travel bill, paid for with federally subsidized Amtrak funds, was run up despite an Amtrak regulation on employee business travel that specifies: "Whenever possible rail travel should be used."

The memo covers only airplane tickets purchased using Amtrak's Air Travel Card account, which it said totaled "over \$600,000." Sources within Amtrak said employees also bought a substantial number of airtickets — perhaps another \$300,000 worth — with other credit cards or with cash.

"It appears to me that considerable traveling is incurred by our relatively small management staff," Sterns said in the memo. "In addition, as we are in the rail travel business, greater use of our facilities might be warranted, particularly at off-peak times."

Stern's memo also admonished the department heads that when employees fly on business "the lowest class fare available should be used."

Amtrak, which had 5,384 employees on Dec. 31, operates an average of 225 passenger trains daily and serves every major city in the United States except Cleveland, Toledo, Ohio and Des Moines either directly or through connections with the few remaining non-Amtrak railroads. It is expected to receive a federal subsidy of \$155 million in the current fiscal year.

There has been widespread criticism of Amtrak on the basis that many of its supervisory personnel, and especially Lewis and

Casey Seeking Office

Robert J. Casey, executive director of the National Association of Railroad Passengers and the RAIL Foundation, is a candidate for state senator in the May 21 Republican primary. He is seeking to upset incumbent Robert Fleming in the 40th Senatorial District, which is the Northern Section of Allegheny County (Pittsburgh Area).

his senior lieutenants, seldom ride Amtrak trains.

"It's understandable, of course, that due to time constraints and the sketchy nature of service on many of Amtrak's routes there will have to be some flying by Amtrak employees," Anthony Haswell, chairman of the National Assn. of Railroad Passengers, said when told of Sterns' memo.

"But my general observation is that if responsible Amtrak management officials rode the trains more often, the public would soon get better service," he said. "Outside of a few trips on the Metroliner and a few of the crack trains, Amtrak's upper management is really very unaware of the situation on the trains they are responsible for running."

"They just don't know, for example, that equipment is coming out of the shops unrenovated, with broken lights and jammed closet doors," he said.

An Amtrak spokesman said it is company policy that employees are to take trains on business trips, but he added, "There are times when time is of the essence and other modes are preferable—for instance it makes little sense for an Amtrak executive to spend three nights and two days taking a train to the West Coast for a one-day meeting, although some of our people have done that to learn about our service."

The spokesman also said that during the summer and holiday seasons Amtrak trains are full and employees must seek other modes of transportation.

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Yes, I want to aid the cause of better rail passenger service. I understand I will receive a membership card and a monthly newsletter to keep me informed of developments.

Enclosed is my remittance for the category checked. I understand that part of this amount is for a one-year subscription to the newsletter.

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Amtrak Needs Modern Railroad Repair And Maintenance Shop

(continued from page one)

manufactured for years. Amtrak cars also run on 78 varieties of wheel-and-axle assemblies.

Certainly, keeping these cars in good running condition is a major task. For that reason Amtrak should be purchasing parts to standardize these cars. And the work should be done in Amtrak shops with Amtrak employees.

There will be no relief from the hodge-podge maintenance "system" until Amtrak purchases or leases two or three major repair shops in which all heavy Amtrak maintenance would be concentrated.

Possible facilities that Amtrak should consider are: St. Louis Car Co. plant (the money-losing company is considering leaving the passenger/transit car market), Penn Central's Beech Grove facility in Indianapolis, a portion of PC's facility in Wilmington, Del., a portion of PC's shops in Altoona, Pa., or the now underutilized, fully-equipped Union Pacific complex in Cheyenne, Wyo.

Furthermore, cleaning and spot maintenance crews in large terminals should also be Amtrak employees.

Who's responsible for this mess? We look to Amtrak President Roger Lewis and wonder why such a common-sense program wasn't started two years ago. We only wish Mr. Lewis could be with us when our air conditioning goes out in the middle of a hot August afternoon.

Interstate Railway System Proposed By Four Senators

A bill calling for an Interstate Railway System (similar to earlier bills backed by NARP) has been introduced in the Senate. It would provide \$2.5 billion in Federal assistance for modernization, rehabilitation and maintenance.

Sponsors of the bill are: Senators Lowell P. Weicker, William D. Hathaway, Vance Hartke and Abraham Ribicoff.

DOT's secretary would be empowered to set the standards from an engineering and economic standpoint that would be separate from FRA's minimum requirements for safety. The lines would be maintained for smooth and dependable freight operations at 60 mph.

Railroads handling 20 million ton-miles of freight traffic per mile of line a year would be included in the system and provided with 500 million in Federal aid for rehabilitation work if they do not have the resources or are unable to pay back guaranteed loans. Federal loan guarantees of one billion will also be provided for required work.

The bill would make it illegal to postpone or defer maintenance work. Senator Hartke said "the deterioration of roadbed and trackage is the single most important problem facing the rail industry..." The proposed legislation, he added, would provide money to rehabilitate the lines and insure continuation of vital rail freight service in smaller and rural areas.

The Gospel Of Energy Conservation

ACCORDING TO GREYHOUND, BOEING AND SOUTHERN PACIFIC

Several NARP members have written us questioning the accuracy of the Greyhound advertisements of last January depicting an Amtrak train as only a little more energy-efficient than an automobile, and far less energy-efficient than a Greyhound bus.

The figures used by Greyhound are shown at the top line of the table of modal energy efficiency which appears elsewhere in this newsletter. This data is weighted by the following load factors based on 1970 experience:

Busses-	46%	Trains	37%	Autos-	48%
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We believe that 1970 load factors for passenger trains are irrelevant, because the poor showing was the inevitable result of at least ten years of downgrading of service and discouragement of patronage by railroads who wanted out of the passenger business. On the basis of assumed 50% load factors, trains make a more respectable showing, as indicated in the second line of our tabulation.

Another drawback to comparing modal energy efficiency on historical experience of recent years is that the comparison is between modern, well-maintained busses and airplanes on the one hand and obsolete, neglected trains on the other hand. If modern trains are compared to modern busses at equivalent load factors, we believe that a re-run of the Greyhound ad would have to show the train more than halfway between the auto and the bus rather than just ahead of the auto.

Boeing Aircraft claims that planes are not as fuel-inefficient as the figures indicate, because for longer distances they fly in a straight line compared to circuitous rail routes. However, while most planes go non-stop between major cities, trains stop at intermediate points. Were planes to make all these stops so as to provide a comparable service, their fuel consumption would rise substantially. Also, account should be taken of the larger amount of crude oil needed to produce a gallon of highly refined jet aviation fuel, and the amount of energy used in the refining process.

Southern Pacific, still relentlessly pursuing its goal of elimination of passenger trains on its tracks, called upon Stanford Research Institute to produce a report entitled "Fuel Usage for Passenger Transport Between Selected City Pairs". Some of the data from this report appears in our table of modal energy efficiency. SRI concludes that:

"busses are the most efficient utilizers of energy for passenger transport, and automobiles are the least efficient. Trains are less efficient users of fuel than full-size busses in every instance.

Wide-body aircraft with high density seating are more efficient than automobiles over extended trips.

The claim that trains are less efficient than busses "in every instance" is not true, because the report's own figures show a rush-hour SP bi-level commute train and a BART rapid transit train as more energy-efficient than the typical gasoline or diesel bus used for urban and suburban transit.

Data for intercity trains was taken from four Amtrak routes—New York-Washington, New York-Chicago, Chicago-Los Angeles, and Los Angeles-San Francisco. Energy efficiency (or inefficiency) on the last three of these routes reflects the performance of the ancient, worn-out diesels used on most Amtrak routes since 1971 (While new motive power is used on the Santa Fe between Chicago and Los Angeles, SRI used SP, not Santa Fe, fuel consumption data).

In contrast to trains, SRI scoured the globe in its endeavor to make busses and airplanes look good. Among the busses evaluated is a German double-decker, whose US acceptability on safety and service grounds is left to speculation, and a 1958 German-built articulated bus which for reasons unstated has not been duplicated despite being in Oakland transit service since 1966. Accordingly, if the intention was to present a balanced report, SRI should have evaluated the Amtrak French Turbos, the Japanese Tokaido trains and other advanced design trains around the world.

As for airplanes, SRI first cities figures for Boeing 747 performance between San Francisco and Los Angeles, Chicago and New York, and New York and Washington, even though 747's don't operate between those points. In support of its conclusion that wide-body aircraft are more efficient than automobiles over extended distances, SRI brings forth a plane described as the 747SR, with a certified capacity of 537 passengers. However, no US performance data is available since the plane has been sold only in Japan. No doubt, this creation is Japan Air Lines' response to the Tokaido trains.

The question occurs as to whether "pushers" are needed to get this plane fully loaded, as they are used in Japanese commuter train service. Be that as it may, it seems clear that an airplane accommodating 537 Japanese has about as much relevance to US energy consumption as chopsticks have to US food consumption.

If Mr. Biaggini thinks differently, we urge him to go to Japan and arrange to be the 537th passenger on board.

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