



Information

September 1978

Independent Truckers Show 55 Saves Fuel At Double-Nickel Challenge

On August 1-3 on the 7½ mile high speed oval track at the Transportation Research Center of Ohio (TRC) owner-operators answered the "Double-Nickel Challenge" and proved for themselves that, in almost all cases, 55 saves fuel over higher speeds.

Thirty-two truckers ran 45 miles each at 55 mph and at whatever higher speed they felt offered best fuel economy. 26 registered better fuel economy at 55 and only 6 could get better fuel economy at higher speeds despite various attempts by some of the drivers to beat the challenge and adverse winds on Wednesday morning. Overall, the test runs



Radar speed checks were made on each truck at Double-Nickel Challenge.

dropping down two gears produced a measured 9 percent saving at 62.4 mph compared to 55 mph!

Given the pluses and minuses, the 32 trucks averaged 10.4% better fuel economy by dropping from an average of 62.3 mph to 55. For an owner-operator driving 100,000 miles a year, each 1% improvement in fuel economy can mean \$100 saved. So the 10.4% average fuel economy improvement seen at East Liberty could be worth \$1,040 per year in fuel savings to a truck owner.

Drivers came from as far away as Florida and Arizona to test their vehicles on the TRC track. Many brought their wives and children and a few even invited their parents to come and watch the event. Rooms and meals for the drivers and their families were supplied by members of the Voluntary Truck and Bus Fuel Economy Program who acted as sponsors of the "Double-Nickel Challenge." Each driver also carried away a certificate thanking him (or her) for participation, signed by NHTSA Administrator Claybrook and Secretary of Transportation Adams,

as well as a bag of mementos (hats, jackets, calculator, clock radio, books, cordless drill, fire extinguisher, belt buckle, etc.) provided by the sponsors. The sponsors also supplied 2 wind deflectors, a fan clutch, winter jackets, pen and pencil sets and a desk set, which were given out in daily drawings.



Truck Safety Inspection at Vehicle Dynamics Area.

An overwhelming spirit of cooperation and interest in learning, among the owner-operators, industry and Government personnel present, built up as the days progressed. Many drivers arrived early and stayed on beyond their test day to observe and talk to the sponsors. Participant and observer drivers spoke at length to engineers from truck and engine manufacturers and got a more detailed knowledge of the rigs they have been driving. Government representatives were impressed by the interest shown by owner-operators, who were willing to give up one or more days of work and travel to East Liberty, at their own expense, to participate in the demonstration. It was an extremely valuable event for all who participated.

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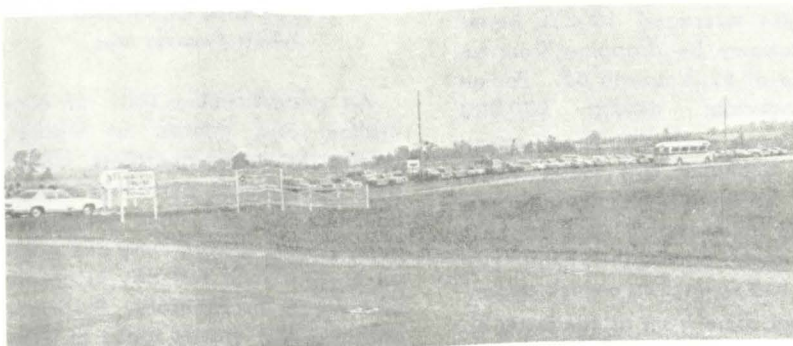
DOUBLE NICKEL CHALLENGE			
VOLUNTARY TRUCK AND BUS FUEL ECONOMY IMPROVEMENT PROGRAM			
CONTESTANT	HS RUN	55	% SAVED
	MPG	MPG	AT 55
ROBERT A KASH	59.2	4.66	
JOHN DIETZ	62.2	6.16	
ROBERT C LEWIS	66.0	4.18	
RONALD GOEDEN	63.2	4.57	
DENNIS LAFFERTY			
JOHN H DAW		61.0	
MS CONSTANCE			
JAMES C			
JOHN			
DAVID			
RICHARD			

Ms. Claybrook and Mr. Close talk to Mr. & Mrs. Kash, co-drivers of unit #1, as initial 55 mph scores are posed.

of 32 trucks show 5.52 mpg at 55 mph and only 5.00 mpg at an average of 62.3 mph. Fuel economy values as high as 7.4 mpg were registered during the 55 mph runs and values as low as 4.18 mpg were shown during the high-speed runs. Savings as high as 27 percent were measured on the first day comparing a run at only 62.2 mph with 55 while on the second day higher winds during the 55 mph run and

Double-Nickel (con't from page 1)

A total of 161 owner-operators submitted applications to participate in the demonstration program in time for the final draw. Thirty-one were chosen at random to be representative of the types of vehicles and engines which applied to run. A "free draw" was given to National Highway Traffic Safety Administrator Joan Claybrook who picked Ms. Constance Kyler, the only woman owner-operator who applied. Another "free draw" by Harry Close, Manager of the Voluntary Program, was accepted by "Overdrive" magazine, a strong opponent of the 55 mph speed limit. "Overdrive" representatives appeared at the "Double-Nickel Challenge" to call it "rigged" and a "fraud," but they did not bring a truck and driver to run, and they departed from the test center, coincidentally, immediately after the posting of three "winners" on Wednesday morning.



Crowd of cars parked at TRC entrance.



Observers gather around refueling of first truck after high speed run.

As the final scoreboard shows, a "doubles demonstration" unit was run at the end of the third day to fill the 33rd test position. That unit was provided by the Freightliner Corporation and provided information on the sensitivity of fuel economy to speed for doubles. It was loaded to 73,500 pounds and got 5.78 mpg at 55 versus 5.20 at 60.6 mph, an 11.1% saving at 55.

Voluntary Efforts Save 1.7 Billion Gallons of Fuel Says Secretary Adams

Secretary of Transportation Brock Adams has announced that voluntary efforts in the trucking industry have saved over 1.7 billion gallons of fuel in the 1973-1977 period! At a press conference in August, Secretary Adams and V. J. Adduci, President of the Motor Vehicle Manufacturers Association spoke of the remarkable achievement which has been made by members of the Voluntary Truck and Bus Fuel Economy Program. They were joined by NHTSA Administrator Joan Claybrook and Voluntary Program Manager Harry Close in announcing the good news of the effectiveness of voluntary cooperation. After the press conference, Secretary Adams inspected the two fuel economy test verification trucks provided by White Motors, one a modern fuel saver and the other a standard 1973 model. (Other pairs of trucks have been provided by IHC, GMC and Ford for the Society of Automotive Engineers verification testing of fuel economy measurement standards.)



Secretary Adams expresses his pride in the success of the Voluntary Program. To his left is V. J. Adduci, President of the Motor Vehicle Manufacturers Association, and to his right is National Highway Traffic Safety Administrator Claybrook and Voluntary Program Manager Close.

(...continued on page 3)

Save 1.7 Billion Gallons (con't from page 2)



Secretary Adams, MVMA President Adduci and NHTSA Administrator Claybrook (l to r) admire fuel-saving truck provided for SAE-DOT verification testing.

The 1.7 billion gallons saving represents only savings on new vehicles delivered by Voluntary Program member-manufacturers from 1973 to 1977 with various fuel efficient components, such as diesel engines with Class VI and VII trucks, demand fans, radial tires, aerodynamic devices and fuel-efficient diesels in Class VII and VIII trucks. Savings from retrofitting similar devices on older equipment, lower vehicle speeds, driver training, improved maintenance practices, routing and scheduling or other methods used to conserve fuel have not been totalled as yet.

Secretary of Transportation Adams said that he was especially proud of the Voluntary Program because it involves no Government regulations and very little Federal money. He said the program is significant for two reasons:

(1) "As I said, it's entirely voluntary. The program is not Federally regulated. There are no Government standards to be met. There is no coercion. The decisions are made where they should be made—in the marketplace by the private sector. President Carter wants to reduce the extent and influence of Federal regulatory controls. He has made that very clear in his legislative proposals. Here is a program functioning very effectively without Government intervention or regulation.

(2) "This program represents a cooperative effort by the truck and bus

manufacturers, the carriers, labor and the trade press. The program now has more than 200 members and each year the fuel savings have virtually doubled. The savings in 1977, for example, totalled nearly 846 million gallons compared to 450 million in 1976. So we're very pleased to see that a voluntary program like this . . . is demonstrating that we can conserve energy and reduce the nation's dependence on imported oil. In short, this program complies with President Carter's policy of energy conservation through voluntary Government/private sector efforts."

During the 391 mile trip from Cleveland to Washington, D.C. the fuel economy of the White test trucks, "standard" and "fuel-saver," was 4.85 and 6.91 mpg respectively. The "fuel-saver" produced a whopping 42% improvement over the "standard" truck.

A booklet entitled "New Trucks Save Fuel" provides more detailed information on the make-up of the 1.7 billion gallons of fuel saved. It is available, at no cost, from the Voluntary Truck and Bus Fuel Economy Program, NRD-20, U.S. Department of Transportation, Washington, D.C. 20590, or from the Motor Vehicle Manufacturers Association, 320 New Center Building, Detroit, Michigan 48202.

Keep RPM's Down For Best Fuel Economy At Any Speed, "Double-Nickel Challenge" Shows

At any speed, an owner-operator will want to drive so as to get best fuel economy on the highway, without hurting his engine. The trick today is exactly the opposite of what most of us were taught when we learned to drive trucks a number of years ago. In those days you had to keep the engine wound up with the rpms as near to governed speed as possible. Today the trick is to keep the revs down not up.

For the last few years, diesel engines, whether fuel-economy specials or not, have been designed to run at just about any place between the torque peak and the governed speed. For examples, an NTC-350's torque peak is at 1400 rpm and an 8V-92T's torque peak is at 1400. The rule we have heard is that, if the engine will pick up speed without downshifting, you don't need to downshift. CONTACT A REPRESENTATIVE OF YOUR ENGINE MANUFACTURER FOR INFORMATION ON YOUR PARTICULAR MAKE, YEAR AND MODEL OF ENGINE.

Richard Galvin, driving a 1978 IH Transtar with a Formula 290 engine in the "Double-Nickel Challenge," got the best fuel economy of the three-day test, with 7.40 mpg at 55 mph. Granted his furniture van was empty, but that is truly remarkable mileage. He got 6.34 mpg at 62.2 mph during his high-speed run. In both cases he kept his transmission in top gear, at 1900 rpm during the high-speed run and 1700 rpm for the 55 mph run.

Edward Dolence, driving a 1978 Pete, got slightly worse mileage at 55. During his high speed run (59.0 mph) he stayed in 12th gear (with a 13-speed transmission) nearly against the governor at 2050 rpm and got 4.66 mpg. At 55 he downshifted and brought his rpms up to 2100 and his economy down to 4.59 mpg.

(...continued on page 4)

Keep RPM's Down (con't from page 3)

With the help of a Cummins fuel map for his NTC-350 engine we can see that Mr. Dolence could have gotten better fuel economy during both his high speed and 55 mph runs. Below is a chart of his possible engine rpms and fuel mileage at 59 and 55 mph:

59 mph		
gear	12th*	13th
rpm	2050*	1784
mpg	4.66*	4.90

55 mph			
	11th*	12th	13th
	2100*	1795	1561
	4.59*	4.98	5.05

* actual gear, rpm and mpg observed in the "Double-Nickel Challenge"

Cummins says that Mr. Dolence could have run his engine down to the torque peak, 1400 rpm, without danger of damage. To make it easier to drive he might have wanted to keep 100 rpm or so over the torque peak, maybe limiting himself to 1500 rpm. We can see that he could have run in top gear at both 59 and 55 mph and maximized his fuel economy, while keeping his revs low. Had he followed the engine manufacturer's recommendation for best fuel economy he could have improved his mpg at 59 mph by 5% and at 55 mph by 10%!

With today's engines and those of the recent past, you get best fuel economy at lower rpms and reduce engine wear at the same time. Check with your engine manufacturer's representative about your particular engine and give it a try!

What's The Next Step For The "Double-Nickel Challenge?"

Fifty-five saves fuel—Phase 1 of the "Double-Nickel Challenge" made that clear to any remaining skeptics. The 32 owner-operator participants showed that, on the average, slowing down each mile per hour toward 55 saved 1.4% on fuel. For a truck that goes 100,000 miles per year, each 1% saving in fuel means \$100 more income for the year!

But, as owner-operators and others rightfully point out, fuel is not the only cost of operation. Does an owner-operator lose so much productive work time when he obeys the speed limit that his fuel savings are undercut by his loss of income? Or does he arrive too late to make his delivery and too late to get a choice load "on the flip side"? And what of maintenance and accident costs? Does 55 save or lose money there?

Big fleets seem convinced that 55 saves them money, overall. They add up the costs of fuel, wages, equipment, maintenance, insurance and other factors. If it's true that 55 saves money for fleets, is it also true for owner-operators?

The demonstration that 55 saves fuel at the test track in East Liberty is only Phase 1 of the "Double-Nickel Challenge." We call that phase, "The Race to the Fuel Pump." Owner-operators have shown that 55 wins that race. The Voluntary Truck and Bus Fuel Economy Program and the Department of Transportation plan to sponsor four other "races" to help owner-operators determine factually whether 55 saves or loses money for them, and how much. Phase 2, "The Race to the Loading Dock," will look at productivity at 55 versus higher speeds and at the cost of arriving later for a load versus being first in line to load and unload.

Phase 3 of the "Double-Nickel Challenge" will be "The Race to the Maintenance Shop," in which we will look at maintenance costs when top speed is restricted to 55 and when top speed is allowed to go higher. Phase 4, "The Race to the Hospital,"

will look at the cost, in accidents, injuries and insurance premiums, of 55 and higher speeds. Finally, in Phase 5, all of the costs and benefits of 55 will be added up in "The Race to the Bank." In all the phases we will attempt to retain the identity of equipment and service such that the owner-operator will be able to relate to his particular situation and yet have a full picture of whether he, as a businessman, can save money by obeying the national 55 mph speed limit.

The "Double-Nickel Challenge" looks at 55 strictly as a business proposition for truckers. But all of us must remember that 55 is the law of the land. Those who disobey it are subject to fines and arrest. And those who disobey also blemish the trucking industry's reputation in the mind of the car-driving public. All of us in the industry must remember these important, but oft-ignored facts about 55. If 55 proves to be "bad business" for truckers, we can try to have it changed. Our reputation as decent citizens and our respect for the law demands that the speed limit be obeyed unless and until Congress can be convinced that it should be changed. "The Race to the Fuel Pump" shows 55 saves us fuel and using less fuel saves money. Let's see what the other "races" will show.

Do Truckers Get the Same Results On the Highways That They Got On An Oval, Flat Track?

Many truckers and others have questioned whether the results of the "Double-Nickel Challenge" could be of any value since the test was run on a flat track, without up or down grades and free from the interference of traffic. Some feel that, no matter what was shown in East Liberty, they do better at higher speeds on real highways. They are particularly concerned about energy lost if they ride the brakes down a hill in order to stay at 55 and then have to add extra energy to climb the grade on the other side.

The results of a number of actual highway tests and highway simulations were printed in the March 1978 "Fuel Economy News." The actual highway tests ranged from a UPS run at 55 and 65 around the Columbus, Ohio, beltway, all the way to a 3300 mile on-highway test run by Mack Trucks. General Motors simulated a 632 mile run from Charlotte, N.C. to Memphis, Tennessee with two different engine and rear axle combinations and Cummins also simulated an actual highway run. In all these tests, the trucks got better fuel economy at lower top speeds. UPS ran the same two trucks and got better fuel economy at lower top speeds. UPS repeated their Columbus, Ohio tests with the same two trucks, with the same drivers, at the same speeds (and with gross weights within 1000 lbs) on the test track at East Liberty. The results on the test track were within 2% of the results on the highway, at both 55 and 65 mph!

In a Society of Automotive Engineers paper, Farrar and Stattenfield of Cummins showed that fuel economy fell as average speed increased on a "mountain pass" route, a "hills and curves" route and a "plains" route. Fuel economy dropped fastest with increasing speed on the "hills and curves" route, yet trip time was least affected on this route by top speed.

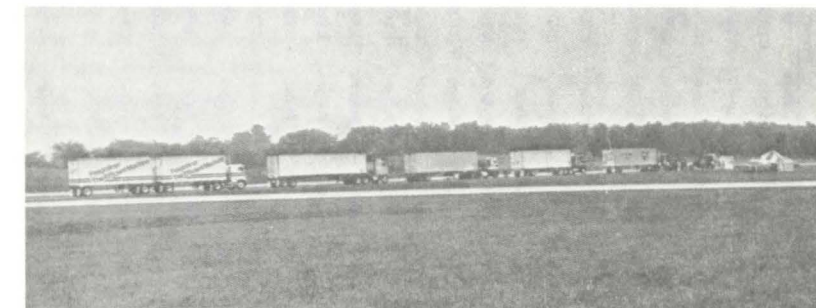
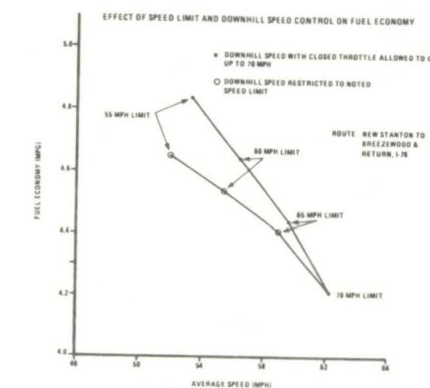
Finally, a detailed simulation of the hilly route between New Stanton and Breezewood on the Pennsylvania Turnpike (I-76) showed exactly what the effect of maximum speed is for a truck operating on a real, mountainous, highway. The top curve of the

figure shows the miles per gallon at speed limits, under power, from 55 to 70 miles per hour, but allowing the truck to go downhill, with throttle closed, up to 70 mph. The bottom curve shows the downhill speed restricted to the speed limit shown. It is clear that there is added fuel economy in taking advantage of the energy gained from sweeping out the grades, but it is also clear that, no matter what reasonable restrictions you put on truck operation, 55 gives better fuel economy than higher speeds.

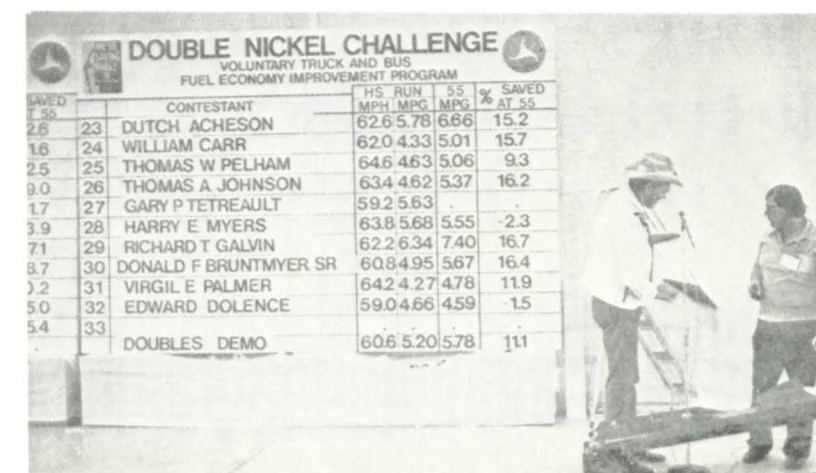
There is no one section of public highway that simulates all the highway that all the truckers operate on over all this country. The level test

track approximates the level Interstates of Kansas, but certainly not the west or east coast mountains. And the test track has the advantage of

being safe, offering repeatable results, and allowing a legal test of speed versus fuel economy. All the simulations and tests, plus actual fleet operation, show that 55 saves fuel on the highway, as it does on the test track!



Trucks line up to run on Thursday.



Harry Close presents certificate of appreciation to driver Ed Dolence.

"Double-Nickel Challenge" August 1-3, 1978

Participant Random Drawing ()	Year	Tractor Make	OO/Conv	Engine HP	Model	Make	Trans Model	Rear Ratio	Tire Size	Type Trailer	Hi-Speed Run MPH	55 MPH Run MPG	% Saved At 55 MPH	Carrier Leased To	GCW - (Gross Weight)
1 Robert A. Kash (119) Tecumseh, Michigan	74	IH	CO	318	8V71	Fuller	RT09513	4.44	10.00 x 20	VAN	59.2	4.66	9.0	Diamond Trans.	44,230
2 John Dietz (40) East Brunswick, N.J.	78	PETE	CO	400	NTC	Fuller	RT012515	4.33	11 x 24.5	TANK	62.2	6.16	8.4	Matlack	30,020
3 Robert C. Lewis (28) Oberlin, Ohio	77	KW	CO	365	8V92TT90	Allison	HT-740FS Automatic 4 x 4	4.11	11 x 24.5	VAN	66.0	4.18	26.3	Bekins Van	52,030
4 Ronald Goeden (46) Ripon, Wisconsin	73	KW	CO	400	NTC	Spicer	RP8516	4.11	11 x 24.5	VAN	63.2	4.51	11.3	Spector	62,230
5 Dennis Lafferty (88) Indianapolis, Indiana	77	WHITE	CO	290	F290	Fuller	RT9509	3.70	10.00 x 20	VAN Furn.	62.0	5.75	21.6	North American Van	27,790
6 John H. Daw (69) Valley Grove, W. Va.	72	CHEV	CO	318	8V71	Fuller	RT09513	4.33	11 x 24.5	FLAT	61.0	4.79	13.8	Pre Fab Transit	66,660
7 Constance J. Kyler (99) Montoursville, Pa.	70	IH	CO	318	8V71	Fuller	RT09513	4.10	10.00 x 20	VAN	64.2	4.93	18.5	Smith	27,660
8 James G. Savage (121) Fennelville, N.Y.	75	MACK	CO	285	END7676	MacK	TRXL-107 5-speed	4.17	10.00 x 22	VAN	62.2	4.54	5.81	Herr Mtr. Lines	51,370
9 John L. Dayton (72) Oklahoma City, Okla.	78	FORD	CO	430	8V92	Fuller	RT012513	3.70	10.00 x 22	VAN	61.6	4.90	21.0	Bekins Van	38,120
10 David W. Rose (139) Morrow, Ohio	75	GMC	CO	350	8V71T	Fuller	RT09513	4.33	11 x 22.5	TANK	65.6	4.50	23.8	Manfredi	65,310
11 Richard S. Johnson (33) Omaha, Neb.	62	KW	CO	335	NTC335	Spicer	R8516 4 x 4	4.44	10.00 x 22	Ref.	66.2	4.62	20.4	Safeway	32,350
12 Robert L. Zedeker (131) Dayton, Ohio	75	WHITE	CO	400	NTA400	Fuller	RT012513	4.11	10.00 x 22	TANK	61.4	5.10	4.97	Manfredi	69,220
13 Matthew Hamilton (74) Fl. Scott, Kansas	78	FREIGHT- LINER	CO	290	F290	Fuller	RT1110	3.97	11 x 24.5	VAN	63.0	5.67	5.58	Brown Ref. Exp.	30,550
14 Raymond Abshire (48) Lanham, Md.	78	FREIGHT- LINER	CO	450	KT450	Fuller	RT12515	3.55	11 x 24.5	FLAT	63.6	5.58	6.28	International Transp.	51,300
15 Michael P. Mack (16) New Riegel, Ohio	74	KW	CO	420	NTA420	Fuller	RT012513	4.33	11 x 24.5	FLAT	62.4	4.90	4.46	Kaplan	77,990
16 James E. Sinsel (54) Tampa, Florida	72	IH	CONV	250	Super 250	Fuller	RT910	3.70*	11 x 24.5	VAN	61.4	5.95	6.05	Brown Trans.	24,860
17 C. Rupert McCully (9) Bellevue, Ohio	76	KW	CO	350	NTC	Fuller	RT12513	4.33	10.00 x 22	TANK	60.0	4.87	5.06	Manfredi	67,990
18 Billy D. Denny (68) Homer, Ill.	78	GMC	CO	380	8V92	Fuller	RT012513	4.44	10.00 x 20	FLAT	61.6	4.55	5.33	Pre. Fab. Transit	28,620
19 Tom Wade (115) Vermillion, Ohio	77	IH	CO	430	8V92T	Fuller	RT012513	4.10	10.00 x 20	LOWBED	59.4	5.65	5.16	Flect	49,250
20 Robert A. Hall (17) Olive Hill, Ky.	74	IH	CO	325	1692T	Fuller	RT012513	4.33	10.00 x 20	FLAT	64.8	4.38	4.30	George Trans.	78,320
21 Mike E. and Dawn Whiteley (7)	76	KW	CO	350	NTC350	Fuller	RT012513	4.33	11 x 24.5	VAN	61.0	4.37	4.50	Mobil Aire	52,280
22 Richard Rowden (87) Tucson, Arizona	78	PETE	CO	360	3406	Fuller	RT12513	4.33	11 x 24.5	FLAT	59.8	4.42	5.10	TriState	46,910
23 Dutch Acheson (143) Columbus, Kansas	77	FREIGHT- LINER	CO	400	NTC400	Fuller	RT012513	4.11	11 x 24.5	TANK	62.6	5.78	6.66	Manfredi	30,550
24 William Carr (65) Coldwater, Ohio	75	PETE	CO	375	8V92T	Fuller	RT012513	4.44	11 x 24.5	VAN Ref.	62.0	4.33	5.01	Wisconsin Cheese	74,360
25 Thomas W. Pelham (101) Palmyra, Wisconsin	76	PETE	CONV	350	NTC350	Fuller	RT012513	4.33	10.00 x 22	FLAT	64.6	4.63	5.06	No Lease	68,550
26 Thomas A. Johnson (66) Kane, Pa.	78	KW	CO	400	NTC400	Fuller	RT012513	4.33	11 x 24.5	VAN Ref.	63.4	4.62	5.37	Food Transport	69,360
27 Gary P. Tetraault (129) Rome, N.Y.	70	GMC	CO	238	671	Fuller	RT09513	4.11*	10.00 x 20	FLAT	58.2	5.63	6.38	Dealers Transit	45,230
28 Barry E. Myers (18) Newark, Ohio	73	IH	CO	350	NTC350	Fuller	RT12513	3.70	11 x 24.5	VAN	63.8	5.68	5.55	Myers Leasing	29,570
29 Richard Galwin (47) Palm Bay, Mo.	78	IH	CO	290	F290	Fuller	RT9509	3.70*	10.00 x 20	VAN	62.2	6.34	7.40	North American Van	25,210
30 Donald F. Bruntmyer (114) Independence, Mo.	77	MACK	CO	315	ETA22673A	Fuller	RT012513	3.87	11 R 24.5	VAN	60.8	4.95	5.67	Ruan	51,180
31 Virgil E. Palmer (27) Rogersville, Tenn.	73	PETE	CO	350	NTC350	Fuller	RT012513	4.11	11 x 22.5	FLAT	64.2	4.27	4.78	Ryder (Ranger Div.)	69,780
32 Edward O. Polence, Jr. (104) Pittsburgh, Pa.	78	PETE	CO	350	NTC350	Fuller	RT09513	4.11	11 x 22.5	VAN	59.0	4.66	4.59	Central Trans.	50,960
33 Overdrive Entry															
34 Freightliner Doubles Demo	78	FREIGHT- LINER	CO	Cummins	V903										

NO SHOW DOUBLES 60.6 5.20 5.78 11.1 73,560

*Single Axle
● Pulled DOT Trailer Available at the track.

The Worth of Voluntarism

The three days of the "Race to the Fuel Pump" at East Liberty, Ohio were, in retrospect, a microcosm of the whole Voluntary Truck and Bus Fuel Economy Improvement Program. It started months ago with owner-operators berating Government for intervening in their business and both sides charging the other with irresponsibility. Spokesmen supposedly representing both sides of the argument captured the attention of the press and great sport was had by the media "informing" the public of the conflict. Good people on both sides of the argument worked diligently at their jobs, swept up in the growing ideological wave.

In the case of the "Double Nickel," yellow journalism at its best (or worst) labored and brought forth an eleven page indictment (on yellow paper, no less) of the challenge as "fraud," "deceit," etc. Indeed the first day at East Liberty saw a confrontation of beliefs. As the fuel saving data came rolling in, however, the thoughtful drivers and observers began to realize that there was something to this fuel saving at 55. The same people had a unique opportunity to meet and work with the manufacturers of the equipment they drive as well as the heretofore fictionalized "Washington Bureaucrats" (who, it turns out, are flesh and blood too). No one could fault the out-in-the-open test procedures and real time posting of results. The support given the affair by manufacturers, insurers, regulated carriers and even a large oil company had its clear message which could not be entirely ignored.

The first night of the challenge saw drivers who had completed their runs and drivers yet to compete, huddled together in discussion as to how to beat the "Double Nickel." Day two showed the results of such discussions coupled with some help from Mother Nature in the form of an 8 mph increase in cross winds during the 55 mph runs of the morning session. The first 5 runs of the day reversed the 18 percent average saving at 55 seen on day one by netting only

0.2% savings. Three of the five were "winners" posting negative savings at 55. The initial jubilation of the "winners" was matched by initial consternation on the part of this bureaucrat and others who had put some high stakes on the line. But above all, these results clearly showed that the contest was not rigged and that the same ground rules applied, win or lose. The ice had been broken and both sides moved together to learn and to share knowledge.

Day 3 started with an overnight thunderstorm which washed out the observer area and brought everyone together in the garage. This physical closeness resulted in a growing emotional closeness with some drivers questioning previous driving techniques and seeking more engineering explanations.

Many of the drivers began asking how they could participate in the subsequent phases of the "Double Nickel Challenge" and one who had run on day 2, one gear down at 55, pleaded to run again the way he now knew would yield greater savings (in top gear at lower rpms).

A "class reunion" would better characterize the wrap-up of activities on day 3, rather than a "challenge," contest or confrontation, which may have seemed appropriate earlier.

The greatest value of the three days is, I believe, the mutual trust and willingness to work together which developed among the "pros" and the "cons." There was no universal shift in ideology, no great awakening to "the truth;" instead, the thoughtful people on both sides learned to exchange facts and to anticipate future cooperation on the complex subjects each of us has to deal with every day.

In my opening paragraph I referred to the three days in Ohio as a microcosm of the Voluntary Program, and indeed it was.

Our earliest attempts to form the Voluntary Program among the largest and strongest elements of the industry were greeted with distrust and many arguments as to why Govern-

ment should not meddle in industry's business.

Obviously these initial concerns have been laid aside as 35 co-sponsors from industry joined with DOT to make phase 1 of the "Double Nickel Challenge" a reality. The unstinting dedication of the more than 75 workers sloshing in the mud to load fuel, twisting wrenches to fit out the trucks or "crunching" data under extreme pressure of time, speaks to their higher calling than corporate profit. Likewise the 1.7 billion gallon fuel saving announced by Secretary Adams and MVMA President Adduci one week later, attests to the value of openly working together—of voluntarism.

We look forward with confidence to greatly expanded future cooperation in the owner-operator sector.

But can someone suggest a new title for our series of "Races"? We have certainly moved away from a "Challenge"!

W. H. Close, Manager
Voluntary Truck and Bus
Fuel Economy Program