

DOT News

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Auto Insurers To Back 55 mph In Big Ad Program

DOT's 55 m.p.h. campaign got a major boost in late June when almost every car insurance company in the country pledged to take an active role in cutting highway speeds.

The agreement had its inception on April 12 when Secretary Adams met with representatives of the insurance industry and asked their support. Represented at the meeting were companies affiliated when the three major insurance trade associations as well as non-affiliated firms, which together write almost 100 per cent of all automobile insurance.

Several of the companies have launched broad-based media promotions of the 55 m.p.h. campaign:

- Metropolitan Life has a large-scale campaign scheduled for this fall in the Reader's Digest.
- Traveler's Insurance has begun running full-page ads which read: "If saving your life isn't important, think of the gas you'll save."
- Aetna Life and Casualty has a radio and TV campaign in the works for later this year.

Additional support will come through company newsletters, magazine pieces, notices to policyholders, stockholders, slogans on metered mail and similar outlets.

Robert M. Beasley, OST coordinator for the 55 m.p.h. program, said the support by the insurance companies is worth several million dollars in the department in free advertising.

(See 55 mph, p. 4)

New DOT Phone Book Can Save Heart Victim

Did you know your new DOT phone book could save your life, or help you save the life of a coworker?

The May 1979 departmental directory now lists the names, phone numbers and room location of 55 persons skilled in cardiopulmonary resuscitation (CPR) in the Nassif building, FOB-10A and the Trans Point building.

For fast response to an emergency, the listing identifies people by floor and building. The roster of CPR people starts on page V in the foreword.

CPR is a technique that combines artificial respiration and external cardiac compression to keep the brain supplied with oxygen until the heartbeat can be restored by drugs or electrical defibrillation.

All the individuals listed as CPR trained in the phone book have completed the American Heart Association certification course.

If you suspect the possibility of heart attack in a coworker, don't hesitate to call the closest CPR technician.

DOT Pushes Study for More Efficient Car



President Carter addresses delegates at the May 18 White House conference of government and industry scientists and executives on the development of a radically more efficient automobile. At left is Thomas Murphy, chairman of General Motors and at right is Transportation Secretary Brock Adams. The meeting had its inception last December when Secretary Adams challenged the auto industry to "reinvent" the car. Story is on the bottom of this page.

Motorists Are Again Warned Not to Store Gas in Car Trunk

Increasing numbers of Americans are storing bombs in the trunks of their cars.

This is the conclusion that can be drawn from recent inquiries made by NHTSA investigators that disclosed the sale and production of gasoline cans has risen as much as 100 percent.

The inference is that the gas cans are being used as a "reserve", stored in the trunks of private vehicles as a precaution against running out of fuel.

Joan Claybrook, head of NHTSA, said, "People are traveling with lethal liquid bombs in the trunks of their cars. It's like riding around with a dynamite bomb that can explode at any time."

Experts have estimated that the explosive force of one gallon of gasoline is comparable to the detonation of 14 sticks of dynamite.

Even a minor rear-end collision or a spark from a short in a tail light or brake

light could set off an inferno resulting in injury or death," Claybrook said.

A NHTSA report shows that there were 1.4 million rear-end collisions in 1977, a figure that breaks down to a 1 in 12 chance of being involved in such an accident.

The safety agency also noted that a Consumer Report, which rated 20 models of gasoline cans in 1974, said that "shoddy workmanship and poor design were evident in most models... and even the best of the tested models is no better than 'conditionally acceptable.'"

Motorists have been observed filling any available container, from plastic household trash cans to regular gasoline cans, with fuel.

Especially hazardous, NHTSA says, are glass and plastic containers. Rusted metal containers should also be avoided.

(Last December, in a speech before the Economic Club of Detroit, Secretary Adams issued a challenge that instantly captured the undivided attention of the assembled auto executives. Mr. Adams said the time was long overdue when we must "reinvent" the car. Herewith is an update on the Secretary's not so modest proposal.)

On May 18 President Carter met with Secretary Adams and top-level automobile industry executives to announce a joint government research program to develop the components of a truly revolutionary car. The approach would be broadbased.

The national importance of the undertaking was indicated by the high caliber of the participants. At the meeting with the President and Mr. Adams were Energy Secretary James R. Schlesinger, Dr. Frank Press, Mr. Carter's science and technology advisor, and Alfred Kahn, chairman of the President's Council on Wage and Price Stability.

More than 20 White House technical, scientific and economic advisors rounded out the government's representation.

On the automotive industry side were Philip Caldwell, president of the Ford Motor Co., Gerald Meyers, chairman, American Motors Corp., and Thomas Murphy, chairman, General Motors. Chrysler was represented by two vice presidents, who stood in for corporation chairman John Riccardo who was taken ill on the morning of the meeting.

President Carter's participation was active—he recommended that the scientific community as a whole, not just that part concerned with automotive technology, be invited to help solve the problem.

Government and industry participants agreed that basic research was the place to begin. Industry said that much of its research was focused on meeting government standards on emission control and fuel efficiency. Henceforth, research would be expanded.

(See CAR, p. 2)



Five trainees selected to the NHTSA upward mobility program meet with Administrator Joan Claybrook and Deputy Administrator Howard Dugoff to receive congratulations and a reaffirmation of Ms. Claybrook's support of the upward mobility program. The trainees began their new jobs in mid-April. From left: Deputy Administrator Dugoff; Jane Hillel, R & D, selected to the position in R & D; Mary Klink, Enforcement, selected to the position in Rulemaking; Marion Tovassoni, Office of Civil Rights, selected to the position in Traffic Safety Programs; Napoleon Jasper, Enforcement, selected to the position in Administration; Ernestine Scott, Traffic Safety Programs, selected to the position in Enforcement; and Administrator Claybrook.

FHWA Offers DC Metro Area Shelter Maps

A set of six maps, each 7½ x 10½ inches, of downtown D.C. and the metropolitan area showing fallout shelters and places to take refuge in the event of major natural and manmade disasters is now available from DOT's Office of Emergency Transportation.

The maps, along with a 15-page cartoon pamphlet describing effective action anyone can take to lessen the danger from such violent natural events as floods, earthquakes, tornados and storms, may be picked up in the Trans Point building.

The maps were prepared by FHWA's Office of Emergency Transportation in cooperation with the District of Columbia Office of Emergency Transportation.



Kenneth B. Johnson

Alvan Bazer

Harry LaFerriere

NAFEC Pilots Aid in Double Save

The crew of FAA's National Aviation Facilities Experimental Center (NAFEC) Boeing 727 "flying laboratory" earned high praise from Joseph M. Del Balzo, acting director of the center, for aiding the occupants of two light planes, each with inflight engine trouble.

Pilot-in-command Kenneth B. Johnson, copilot Alvan T. Bazer and flight engineer Harry LaFerriere were making aerial checks of air navigation equipment in the vicinity of Salt Lake City on March 30 when the incidents occurred.

In one case the private pilot's distress call was picked up just before he lost radio and radar contact with controllers on the ground. The NAFEC B-727 crew reestablished radio contact and provided flight and landing information to the nearest airport, enabling the frightened and confused pilot to land safely.

Shortly afterward Johnson and his crew heard a twin-engine pilot tell the radar controller he was making a forced landing in the desert southwest of Salt Lake City just before all communications with the plane ended. The NAFEC plane descended and after a period of searching, located the aircraft and radioed for a ground rescue party.

The aircraft, with four occupants, had flipped on landing, but all were rescued safely.

In commending the crew Del Balzo said "Such assistance was unusual for your type of mission and is a testimony of your dedication and professionalism in aviation."

DOT Bike Parking Permit Easy to Get

In the last issue, a cyclist writing in the "Gripe" column detailed his frustration and defeat trying to battle the red tape required to park his bike in the Nassif building. Herewith his comeuppance:

I have found that it is possible to get a bike permit the day I apply for it. Furthermore, one need only go to the parking office to get one—there is no need for memos. It may be annoying to pay \$1.70 per month, but the security is worth it. On a nice day the racks are not empty—they are very well utilized.

Easy Rider

(In keeping with DOT News policy, names of writers are not divulged to anyone unless the writer specifically gives permission to do so.)

Ted England Wins Top FAA Idea Title

Teddy E. England, chief of the utilities branch at Washington National Airport, is a thinking man, a trait that recently earned him \$945 and FAA's "Suggester of the Year Award."

England was awarded \$830 of this amount for recommending that temperature indicating tapes be installed on the approximately 3,000 steam traps at Washington National. Called "watchdog tapes," they enable an operator to spot a malfunction at a glance.

The other \$115 came from his suggestion that chain driven valve wheels be installed on boilers so that one operator, instead of two, can easily feed water into the boilers quickly.

His award winning ideas are expected to save FAA an estimated \$26,200 a year in operating the airport's steam plant.

England's agile mind, plus his following through by putting his thoughts on paper, qualified him as FAA's top idea man for 1978. His competition was tough: his suggestions were among 1,629 submitted. Of these, 422 were adopted by FAA. Of these, 66 paid cash awards totaling \$22,000.

Edward B. Pry, supervisor of FAA's suggestion program, said the government stands to save an estimated \$912,594 from the FAA suggestions. "A pretty good return for the \$22,000 paid to our idea people," he said.

Second top suggester is Ben H. Morrow, a planning and appraisal specialist in the Kansas City headquarters of FAA's Central Region. He was presented with a check for \$750 for recommendations he made regarding a method for supplying water at emergency operating facilities (EOF). His plan is expected to save the government \$18,000 a year.



Teddy E. England

"There were no other top winners besides England and Morrow," Pry said. "We returned the other suggestions that made it to FAA headquarters because we did not regard them as being applicable to most FAA operations or locations."

England, a resident of Dale City (Woodbridge), Va., joined the FAA in 1968 as a steam plant operator at Washington National. He became chief of the airport's engineering and maintenance division in December 1977.

To Your Good Health

Joggers, runners and just plain walkers will profit from the film "Feet—A Guide to Keeping Fit," which will be shown at 11 a.m. in room 10330 in the Nassif building on July 26.

The 12-minute movie features the importance of foot care in sport activities and the treatment and prevention of common foot injuries.

The film is the latest in a continuing series sponsored by the DOT fitness center staff and admittance is open to all employees.

DOT Pushes Efficient Car Study

(CAR, from page one)

President Carter asked that an interim progress report be submitted to him within four months, detailing and coordinating the government-industry research effort.

The president said that he considered the problem to be of such importance that he intended to invite other auto-producing nations to join in the search for its solution.

Secretary Adams took his case for the new car to Europe after the White House meeting. Addressing the European Council's ministers of transportation in Belgrad, Yugoslavia, Secretary Adams told them, "Our primary goal in this research effort is to produce a car that uses substantially less fuel or uses a fuel that is not derived primarily from scarce petroleum resources."

Adams invited all the member nations to join the U.S. in the search for a more efficient automobile. He said this was "an opportunity to expand this initiative beyond the boundaries of one nation to a truly global undertaking."

Closer to home, at DOT's Transportation Systems Center (TSC) at Cambridge, Mass., scientists and technicians already had a head start.

Their work began on February 13 of this year, when some 700 scientists and

engineers, at the invitation of Secretary Adams, met at the Center to discuss the feasibility of "reinventing" the car.

The participants included government agencies now involved in automotive research, university and industry personnel, and public interest groups.

Their conclusion: significant advances in automotive fuel economy are possible through a priority program of basic research. From this evaluation, TSC officials issued a program that would concentrate on:

- Thermodynamics, combustion, and fluid flow.
- Energy storage.
- Engine fuel interactions.
- Material science.
- Control systems.
- Friction and wear.
- Aerodynamic drag.

None of these areas are of exclusive concern to the automotive industry—they apply across the scientific spectrum. Therefore, there is a great opportunity for the nation's scientists and technicians to participate in the "reinvention" of the car.

And not a minute too soon, as the world-wide gasoline shortage grows worse.

Coast Guard Artist is Self-taught



Coast Guardsman SK-2 Edward Godbely, stationed at the Coast Guard station at Atlantic Beach, N.C., is a self-taught artist whose work is beginning to attract attention. Here he finishes a portrait of CWO (ret) Fred Gillikin who was the nation's oldest Coast Guardsman prior to his death in July, 1978 at the age of 100. While on an inspection tour this summer to the Coast Guard installation, Coast Guard Commandant Admiral John B. Hayes saw the portrait and asked for it to be hung in his Washington headquarters.

WILL PIEPER'S— "Magnificent Flying Machine"



Add the name Pieper to the list of American airplane manufacturers.

No, not the Bill Piper whose ubiquitous "Cub" gave wings to tens of thousands of pilots, but *Will Pieper*, chief of DOT's Office of the International Secretariat.

Pieper this month test flew his Smythe "Sidewinder," an all-metal, two-place, low wing plane which he began building in his garage four years ago.

"It flies beautifully," he said, after an initial 15-minute flight June 12 from Manassas airport, where the craft is based. "She responds exactly the way I expected."

By any standard, the plane is a knockout. It has a 24-foot wingspan, a length of 19 feet and weighs 1,053 pounds, which is 73 pounds heavier than its original design weight. The difference results from modifications Pieper made.

"I put in a 150 h.p. Lycoming engine instead of the 125 h.p. engine called for in the original plans," Pieper said. He also discarded the original fixed-pitch propeller, substituting a Hartzel constant speed prop. These changes are expected to give him a cruise speed of 165 m.p.h., about 20 m.p.h. faster than the plane's designer anticipated.

Custom Engine Controls

Pieper, who is a retired Air Force colonel with more than 4,000 flying hours, most of these in fighter planes, modified the engine controls to suit his military flying background.

He dispensed with the typical light plane push-pull engine control system and grouped his throttle, fuel mixture and propeller controls in a quadrant on the left side of the cockpit "... where they are supposed to be," he says.

Also unique to his "Sidewinder" is an electric elevator trim system operated from a thumb switch on the control stick and driven by a 12 volt motor that had previously raised and lowered windows in a Cadillac.

The stick also contains another Pieper innovation as far as the "Sidewinder" goes—a control switch for his NavCom "Alpha 200B", an extremely compact unit that can be used for navigation and communication.

The switch has the added function of automatically shutting off the voice-actuated pilot/copilot intercom when the pilot is using the radio, while still permitting the copilot to hear transmission and broadcast.



Will Pieper takes notes as inspector Ralph H. Moffitte from FAA's Harrisburg (Pa.) Engineering and Manufacturing District Office 44 probes the engine's oil and electrical systems and controls. No major deficiencies were uncovered. The craft easily won its Airworthiness Certificate.



Pieper's grouping of his engine and propeller controls in one quadrant on the left side of the cockpit reflects his background as a military pilot. Instrumentation in his plane far exceeds basic FAA requirements.

Again reflecting his fighter pilot background, Pieper added a speed brake to his version of the "Sidewinder." About 18 inches square, the speed brake is extended and retracted by an electric motor and hydraulic cylinder that had originally been part of the convertible top mechanism in a 1967 Ford.

Not visible at the moment are two additional Pieper modifications: the airplane is completely wired for the installation of navigation lights (not required for a plane intended for daytime flight only) and it has the necessary piping and auxiliary electric pump for a tip tank on each wing. The added fuel would supplement the on-board 21 gallon tank, which provides a cruise range of some 325 miles. This figures out to about two hours, with a comfortable fuel reserve.

Planes of this weight usually carry only the basic flight and engine instruments—altimeter, airspeed, turn-and-bank, magnetic compass, tachometer, engine temperature, fuel gauge, oil pressure and, possibly, rate-of-climb.

Pieper filled out his panel by adding gauges that give him readings on manifold pressure, oil temperature, exhaust gas temperature selectively in all four exhausts, artificial horizon, directional gyro, a "G" meter, ammeter and a



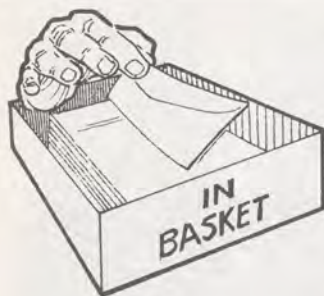
Pride of accomplishment is plainly visible on Will Pieper's face and stance. The plane made its maiden flight on June 12 from Manassas (Va.) airport.

precision clock. Where appropriate, all are backed by circuit breakers.

Pieper's meticulously kept records show an outlay of \$7,200 for raw materials—steel tubing, sheet aluminum—engine, propeller, wheels, tires, instruments, communications equipment, small hardware, paint, etc.

Not shown is the cost of labor, which would be high at commercial rates. But, according to Pieper, it was a labor of love and therefore was cost free.

Experts have estimated the plane would have a price tag of at least \$25,000 if offered on the market, but selling is positively not in Pieper's plans.



Reader Asks Amtrak 55 mph Questions

The article "Secretary's Reasons for Recommending Amtrak Route Cut" in the May 31 issue of *DOT News* stresses that the Amtrak system "wastes energy" by using "four to six gallons of fuel a mile."

Why does the Amtrak not switch from diesel fuel oil to electricity?

The saving of diesel fuel could be enhanced by generating electricity at or near a coal mine and transmitting it by a thin, superhigh-voltage wire—at least on main routes, where the expense of locomotives with electric feed cables could be quickly amortized and the costs of transformers could be easily shared with public utilities?

The article further advocates the efficiency of the 55 mph speed limit for automobiles.

I have two questions on this: (1) What happened to the truckers' proposal of last year to prove that 55 mph speed limit is not efficient? (2) Is a minimum speed not at least equally important?

Coast Guardman

You are right about the advantages of electricity over diesel oil as the fuel for passenger trains. DOT is making a major investment in the electrification of the Northeast Corridor tracks between Washington and Boston.



Not one to lose his cool, no matter what goes up (or down), Alan Novakoff conducts business as usual at his desk at FAA's National Aviation Facilities Experimental Center (NAFEC), Atlantic City, N.J. Novakoff, an electronics engineer in the Aircraft and Airports Safety Division, is working on the VICON (Visual Confirmation of Voice Takeoff Clearance System) project. The office, along with most of the building, was destroyed when a transformer in the basement blew up. Former VICON project manager Nelson J. Miller, in a post-explosion inspection, said the destruction of the building will not result in any significant delay in the schedule.

NHTSA hosted a two-day test of the truckers' challenge to the 55 mph speed limit last year at their Ohio test-track. Truckers were invited to run laps at 55 and at whatever speed they chose with identical loads. Quite a few drivers responded. The tests were held and the fuel efficiency of the 55 mph speed limit was confirmed.

A check with NHTSA on minimum speed limits elicits the comment that minimum speed limits are important safety controls but have little effect on energy consumption. To date, NHTSA has left the establishment of minimum speed limits to the states and most have established limits on the Interstates of 40 to 45 mph.

The Editor

(The names of writers to "In Basket" will not be printed unless the writer specifically gives permission to us to do so. All letters, however, must be signed to be printed.)

Brown bag Show Biz Set for DOT Plaza In July, August

DOT brown-baggers and luncheon loungers tapped their feet and clapped their hands in time with the Virginia Jazz Theater dancers who presented a 45-minute program in the Nassif plaza on June 21.

The troupe is part of a group of young entertainers who will be performing in the DOT courtyard as part of the National Park Service's "Summer in the Parks" program. The noon performances are scheduled for each Thursday through mid September.

In charge of the dance performance was Marilyn York, assistant director and choreographer.

DOT spectators saw dance numbers from hit musicals including "Chorus Line," "N.Y.N.Y.," "Chicago," "Pippin," "Hair," and "The Wiz."

Scheduled to appear on July 12 is the jazz and light rock group, "Images" and on July 19, the "Jim Horowitz Jazz Trio."



Jack looks 'em over with a gimlet eye as Hank Allen, former Washington "Senator" star outfielder connects for a stroll around the bases. Jack's umpires officiate at some 26,000 softball games a year in organized league play in the Washington area.

Arbiter of Arbiters

DOT Printer is Boss of all DC-area Organized League Softball Umpires

John "Jack" Mowatt, a journeyman printer in DOT's publishing and graphics division, wields an awesome power.

No, not at the keyboard of the electronic typesetting machine he operates on the third floor of the Nassif building. It is after work and on weekends and holidays that he becomes one of the most important figures on the local amateur sport scene.

He's been called the "Arbiter of Arbiters," but his less colorful title is "Assigning Commissioner of Greater Washington Softball Umpires." As such he has direct control of 150 men and women who officiate at some 26,000 ball games a year. Their jurisdiction includes the District, and Prince George's and Montgomery Counties.

"Our umpires come from all walks of life," says Jack whose sunnyside up personality is a trademark. "We have doctors, lawyers, military people, housewives, school teachers, police and firemen and government employees from GS-2 to GS-16. They come from all walks of life, but they have one thing in common—they all love softball."

And indeed they do, if attendance and punctuality are any measure. Of the 26,000 games scheduled for last season, only 40 had to be played at a later date because umpires were unable to keep their appointments. One reason for this good record might be attributed to Jack's making assignments in two-week blocks, enabling officials to adjust their "other life" to accommodate the softball schedule.

"Our umpires are a versatile lot," says Jack, a burly man who is surprisingly fast on his feet. "They are at home calling slow, fast and modified pitch and youth games."

The standard fee paid umpires who work in the local area is \$11 a game. Usually only one umpire is assigned per game. Several games a week can add a comfortable padding to the wallet, Jack says, adding that a lot of officials would donate their services because of their fondness for the game.

Money to pay the umpires comes from an entry fee ranging from \$300 to \$600, depending on the number of games and the kind of league entered—military, industrial, church, etc.

Mowatt entered softball umpiring by way of the usual route—he played the game in high school and later with a volunteer fire department team and then started calling them from behind the plate. A high point in his career came in 1975 when he was national tournament umpire in the playoffs at York, Pa. Because of schedule changes requiring catch-up, the last game of that competition ended finally at 4 a.m.

In 1976 the Washington area hosted the national tournament, drawing the largest number of participants ever. Mowatt was responsible for coordinating the duties of 75 umpires during this meet.

He is still an active umpire, trying to officiate at a few games a week, but he has given up playing the game. Since 1968 he has umpired 2,292 games that he has record of.

"I could never do the commissioner's job without the help of my wife, Jean," Mowatt says. "She is a full-time housewife and handles the phone when weather or something forces cancellation of games or when officials can't make it."

This takes some doing when it is realized that as many as 300 league games are scheduled for a typical Sunday.

"Paaaaaaay Baw!!!!"

Car Insurers Back 55 mph

(55 mph, from page one)

He said that, in coming months, DOT will be working with other organizations in highway-related transportation, including the American Trucking Association, the International Brotherhood of Teamsters, Continental Oil Co., Trailways, the American Automobile Association, and others.

The FHWA estimates that the 55 m.p.h. program saves about nine million gallons of fuel every day. If everyone obeyed the speed limit, FHWA says, the saving could amount to 15 million gallons a day.