news
NHTSA

Volume 2
Number 4

Published by
National Highway Traffic
Safety Administration

U.S. Department of
Transportation
Washington, D.C.

NHTSA News is a semi-monthly publication prepared for all agency employees by the Executive Secretariat, Room 5215, Nassif Building, 426-2876. Distribution is on the 1st and 3rd Monday of every month.

Editor M. J. Noll

February 1976

Who's Who in NHTSA

Sew What? Fashions for Saving

Fashion passion. The unfortunates who are struck by the fashion bug often bemoan the lack of funding necessary for a chic wardrobe. How we each emerge as butterflies from the tight cocoon of dollar bills is a matter of individual ingenuity.

One ingenious individual is Sandra L. Beamer, secretary-steno in the Office of Chief Counsel. Sandy sews most of her own clothes and does some crocheting as well.

When Sandy was in the eleventh grade, her mother put her in stitches by suggesting she take a sewing course. Sandy had no formal sewing lessons previously and has had none since. But the instructor was very good, Sandy admits. From her Sandy learned all the short cuts and was taught how to preserve a pattern. Like most home seamstresses, Sandy will use a pattern that she likes several times, creating her own variations. If she spots a pleasing style in a store, she'll memorize it and adapt it to one of her own creations without the aid of a pattern.

She can whip up an outfit "on the spur of the moment" for special occasions. From start to finish, she says her creations take "a few hours."

Sandy's favorite fabric is gabardine, but she has also worked with knits, polyester, jerseys, corduroy, and once with a sequined fabric which seemed to pose no special problems.

Sandy Beamer, Office of Chief Counsel, beams in one of her favorite creations, a baby-blue gabardine jumpsuit.

Some of her wardrobe is ready-made. She explains, "If I go to the trouble of making a pantsuit, I don't mind buying a blouse. It's a treat when I buy something special." And there are still shoes, jewelry, purses, etc., to be considered. However, she feels that the clothing she sews herself, for the most part, can be better than store-bought items.

Her projects are not limited to her own wardrobe. Sandy has made clothing for friends and members of her family. She once made twin dresses for

(See Fashions on page 3.)

Death in 7/10 of a Second

SUDDEN DEATH IS AN ALL TOO FREQUENT RESULT OF AUTOMOBILE ACCIDENTS. WE AMERICANS SEEM TO PASS OFF HIGHWAY DEATHS AS SOMETHING THAT HAPPENS TO THE OTHER GUY. PERHAPS KNOWING HOW SUDDEN DEATH OCCURS TO AN UNRESTRAINED DRIVER WILL MAKE SOME OF US THINK TWICE ABOUT OUR DRIVING HABITS.

The automotive research center at Cornell University has reconstructed an accident where a car travelling at 55 miles per hour strikes a solid tree. In slow motion, here's the way it goes:

1/10 of a second--Your front bumper and grillwork collapse and slivers of steel penetrate the tree to one and a half inches or more.

2/10 of a second--The hood crumples as it rises and smashes into the windshield. The spinning rear wheels leave the ground, the grill disintegrates and the fenders contact the tree, forcing the rear to splay out over the front doors. YOUR BODY continues to move forward at its original speed as the structural members of the car act as a brake on forward momentum. The force acting on your body is twenty times that of gravity. Your body weight is now 3,200 pounds (160 pounds). Your legs straighten out and snap at the knee joints.

3/10 of a second--Your body is now off the seat, torso upright, knees against the dash. The frame of the steering wheel begins to bend. Your head is near the sun visor; your chest is above the steering column.

4/10 of a second--The first twenty-four inches of the car's body is completely demolished but the rear is still travelling at 35 mph, with your body going at 55 mph. The motor block crunches into the tree and the rear of the car rises high enough to scrape bark off the low-hanging branches.

5/10 of a second--Your fear-frozen hands bend the steering column up almost vertically. The force of gravity impales you on the wheel shaft. Steel punctures your legs and intercostal arteries. Blood spurts into your lungs.

6/10 of a second--The impact has ripped your feet from your shoes. The brake pedal shears off at the floorboard. The chassis bends in the middle, shearing body bolts. Your head smashes into the windshield. The rear of the car falls downward and spinning wheels dig into the ground.

7/10 of a second--The entire body of the car is forced out of shape. Hinges tear, doors spring open and the seat rams forward, pinning you against the steering shaft. Blood leaps from your mouth. Shock has frozen your heart. YOU ARE NOW DEAD.

Tickets, Anyone?

Like to see some of the great events taking place at the Capital Centre? You can now see them easier than ever--and save money too!

Discount tickets can be purchased by DOT Employee Recreation Association members at the DOT/ERA Store, room 4338, Nassif. Members can also shop from a fine selection of merchandise available in the store at substantial savings. The store has TVs, radios, Citizen-Band radios, watches, candy, etc.

1976 membership cards can be obtained at the DOT/ERA Store; room 620, FOB 10A; and room 1113, Transpoint for $2.50.

Membership also enables you to participate in charter trips, group dental and life insurance plans, plus future insurance programs. In addition, members can join in the fun of DOT/ERA bowling, tennis and basketball leagues.

'Round About NHTSA

LUCKY WINNER! And just in time to pay off some of her Christmas bills. Mrs. Catherine Larsen was one of the lucky winners in the Maryland Lottery this week.

"I just couldn't believe it," said Catherine. "I got up during the night to make sure I read the numbers right."

Catherine also won a Mustang in 1969. She won the car by filling out a card at Sears Roebuck.

Hope your luck continues throughout 1976, Catherine.

Job Openings

For complete details on these job openings, see the official vacancy announcements. Vacancy announcements are posted on the NHTSA Bulletin Boards at both the Nassif and Transpoint Buildings. They are also distributed to each Office Director.

Research Highway Engineer, GS-810-9, RD. Opens: 1-26, Closes: 2-15. NHTSA 76-40.

Financial Manager, GS-501-13, Region X. Opens: 1-28, Closes: 2-18. NHTSA 76-41.

Highway Safety Research Engineer, GS-801-13, RD. Opens: 1-29, Closes: 2-19. NHTSA 76-42.

Highway Safety Research Engineer, GS-801-13, RD. Opens: 2-2, Closes: 2-23. NHTSA 76-43.

Position Classification Specialist, GS-221-12, AD. Opens: 2-4, Closes: 2-25. NHTSA 76-44.

Fashions

(from page 1)

herself and her mother. A pair of pants for her brother was a challenge, not quite a success. He wouldn't wear them.

Besides sewing, Sandy likes sports, "tennis, bowling, baseball, basketball...anything but roller skating," she says. She has been attending night school at Prince George's Community College, studying business administration. She feels she would like to get into an administrative profession eventually.

NHTSA Digest Makes Debut

There has been a long-standing need for a brochure which would describe "who we are" and "what we do" in readable terms to serve as an information booklet on NHTSA. Such a publication was prepared entirely from excerpts from the 1974 Annual Reports and has recently been received from the printer. Copies are available from Mrs. Kitts, room 5202. PACS has tried to make it as attractive, readable and non-technical as possible. NHTSA staff members are invited to take copies home to friends and families. John Knievel, Bobby Boaz, and Bea Dane would welcome your comments, and especially those of your teenage children who drive, or who are about to be eligible to drive. PACS is considering doing something similar based on the 1975 Annual Reports and would like it to be as useful as possible to a wide range of ages.

Bloodmobile Needs Your Support

The Bloodmobile on January 20 was less successful than in the past because NHTSA employees didn't donate as they have in the past. Because of the small turnout, NHTSA is not up to its quota for this time of the year. The next Bloodmobile will be at the Transpoint Building on March 23. Please get out and give so that all our families can have full coverage under the Plan.

We are sorry about the difficulty the donors experienced at the Red Cross Chapter during the Xmas holiday. The difficulties have been brought to the attention of our contact at the Chapter and we have been assured that things will be better in the future.

A New Way of Classifying Jobs

The Civil Service Commission has approved implementation of the Factor Evaluation System for classifying white-collar jobs, and has authorized its staff to consult with agencies and unions in the development of a Classification Standards Advisory Board.

FES provides an approach and format that describes and evaluates jobs in terms of factors, factor levels, and benchmarks. Tests of the new system indicated that it will be more understandable and more acceptable to supervisors and employees.

The proposed Advisory Board would have an equal number of agency and union members, chaired by a CSC official. In addition to serving an advisory role on classification standards, it would recommend policy changes for consideration by the Commission. We will keep you posted on developments.

Letters from the Young Set

Many of the letters referred to NHTSA are from young people. Each has a message. Each provides a stimulus. These young persons help us realize how very important our goals are. Their lives, the lives of their parents and loved ones are at stake.

Following are a few of the letters that we have received. Others will appear in future issues.

Dear President Ford,
I would think that of all the bus and car accidents, I think that there should be seat belts in all means of transportation. Such as ..... all cars, trucks, airplanes, trains, etc. It would be a safer way of going here there and, everywhere. Oh, by the way, my last name is french, so it is pronounced Boovāe. As I was saying, it really would be a more safe and happier way to move around.

Your friend,
David Bouve
Bethesda, Md.

P.S. Write back to me soon. (In print).

Dear Mr. Ford,

I have a very serious problem to right to you about. I may be only 12 years old but I care about peoples lives. Our class saw a movie today about seatbelts and it opened my eyes! My parents always made me wear a seatbelt and I am glad! anyway my problem is this - this movie was filmed across seas and in that city they had a law that you must wear your seatbelt and I am all for that law! Now I realize that this is vialating peoples rights but in the film they said that it was between life or death and so they passed the law anyway which was good! Now I think you should think this over now I do realize that this takes time and you are very very busy but I care and I am sure you do too! I have written you before and I feel very safe with you being in that office in fact I feel so safe thats why I wrote you my idea. You are a very good man and I am sure the film would open your eyes too.

The poem I wrote on the front came out of my heart I really hope that you try to support my idea.

Love
Kim Matthews
Grand Rapids, Mich.

Happiness is: Having a good friend to share your secrets with.
Happiness is: going to your grammas house.
But most of all Happiness is:

LOVE

Dear Mr. President Ford:

I'm 9 years old. I have an idea about car safety. Like if you get a car and make it out of the oppisit side of the magnete it goes away from the other. Make cars out of it. They won't crash. I have some magnets for you. Put the black side to the black side and put the black dots together slowly and see what happens.

from,
Michael Guthrie
Washington, Pa.

P.S. Right back.

Personnel

Welcome Aboard

Russell Smith, Supvy. Res. Mech. Engr., RD, 1-14.

Thomas Coe, Economist, P&E, 1-18.

Joyce Tannahill, Clerk-Typist, RD, 1-18.

Harry Thompson, Safety Compliance Engr., MVP, 1-18.

'Bye and Good Luck

Herdman Clark, Jr., Prog. Officer, TSP, 1-16.

Joseph Gorham, Cons. Info. Resp., PACS, 1-16.

Marge Ridley, Cons. Info. Resp., PACS, 1-16.

Stephen Levenson, Program Analyst, MVP, 1-17.

John Kosko, Contract Spec., AD, 1-17.

Edward Wallace, Chief, Tire Division, MVP, 1-23.

Francisco DaCosta, Mech. Engr. Tech., RD, 1-30.

Carl Yasi, Management Spec., Region IX, 1-31.

Congrats on Promotion

Thomas Enright, Prog. Anal. Officer, TSP, 1-4.

Troy Ayers, Hwy. Safety Mgmt. Spec., Region IV, 1-18.

Mabel Morton, Writer-Editor, Exec. Sec., 1-18.

Arthur Neill, Jr., Supvy. Physical Scientist, RD, 1-18.

Steven Peirce, Hwy. Safety Res. Engr., RD, 1-18.

Wolfgang Reinholt, Safety Defects Engr., MVP, 1-18.

Japanese Road Sign:
Please drive carefully. Our children may be disobeying us.

OF SPECIAL INTEREST

In an effort to save energy, many consumers are insulating their homes and closing off all drafts and air leaks. This can be hazardous if necessary air intake vents are blocked. In some older homes, furnaces actually need a drafty door or window in order to get enough air to burn the fuel properly. Have your furnace checked regularly by a service company to make sure it is getting enough air to burn the fuel safely.

The Consumer Product Safety Commission has the following suggestions for selection, use, and maintenance of furnaces:

Selection

Be sure that the furnace has a "safety pilot" that automatically stops the flow of fuel when the pilot light goes out.

Have the furnace installed according to all local codes. These usually specify the air-intake and exhaust requirements for safe operation of the furnace.

Use

Cover the metal grates of furnaces with a metal screen which will prevent children--and adults--from touching the hot surface.

If you are insulating your house or trying to block air drafts around doors and windows, be sure that you don't cut off air necessary for the furnace to burn its fuel properly. Have a service company check for this. (Generally, you need 1 square inch of intake air piping for every 5,000 BTUs/hour of heat produced by the furnace.)

Keep flammable liquids (such as gasoline) away from furnaces because the flammable vapors could be ignited by the pilot light in the furnace. Keep these liquids in tightly-capped safety cans in a shed outside--away from any flame or heat sources.

Don't attempt to light a pilot light unless you are familiar with the furnace and the proper techniques. If the pilot light goes out or if the furnace needs adjustment, call an experienced service company or the gas company.

Maintenance

Have your furnace checked at least once every year, before the heating season begins, to be sure that there is adequate intake air and that the exhaust system is working properly. Have flues checked to be sure they are not blocked by debris, which could permit fumes to enter the house.

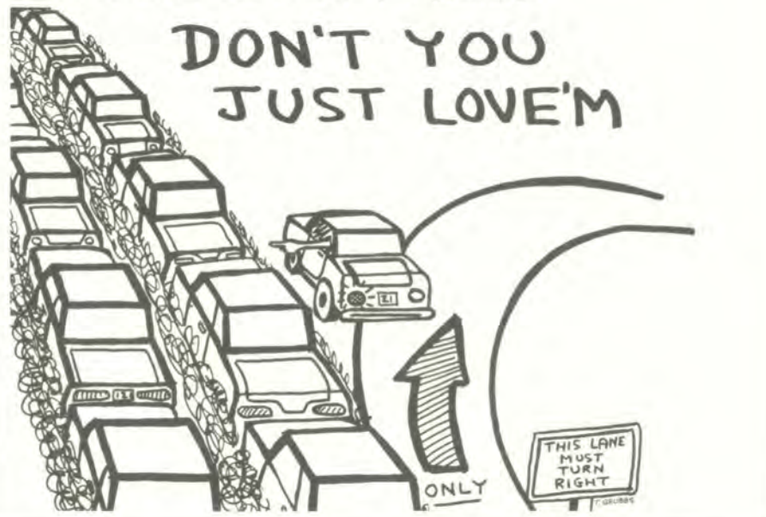
Recent NHTSA Publications

NHTSA employees should find the following publications of special interest. Copies are available from Mrs. Eleanor Kitts, room 5202.

Safety Tips on use of Headlights. A consumer fact sheet that provides some safety tips on the care and use of headlights. By following these guidelines, you will reduce your chances of having an accident because of poor visibility.

Battery Hazards - Explosions and Jump Starting. Tips to protect you from body harm and prevent damage to your vehicle when your battery goes dead. A must for every motorist.

A New Look at Pedestrian Safety. Presents basic, vital facts about the pedestrian safety problem. More importantly, it points out what can be done to prevent such accidents from happening.



Words of Wisdom for Safe Snowmobiling

The swift-flying joy of snowmobiling can too easily crash to a sudden halt. The injury toll for the 1973 season was 19,000. Increasing popularity could send the accident toll much higher.

Following are some words of wisdom from the Consumer Products Safety Commission:

Purchase

Look for these features:

Guards for the drive chain and other moving parts.

Strong and easy to reach passenger handgrips.

Adequate padding on the dash, steering bar, and back end of seat.

A snowflap in back to keep snow off the tail light.

Windshield without a sharp stiff edge for the driver to impact.

Good instruction and maintenance manual.

If you buy a trailer or other attachment, be sure the connection to the main machine is rigid. Don't use a rope to tow a sled because there could be whiplash on turns or a tailgate collision on stops. Be sure the trailer has adequate lights and reflectors.

Use

Become familiar with the snowmobile before driving. Follow this checklist:

Have enough fuel for the trip.

Be sure the drive belt is in good condition.

Align and tighten the ski assemblies.

Check the track for tension and free movement.

Be sure the handlebars turn freely.

Anticipate the weather.

Operate the throttle and brake controls several times before you start the engine.

Locate the emergency shut-off switch--if the throttle sticks, hit the shut-off switch.

Take extra spark plugs, tools, first aid kit, and flares in case your machine breaks down.

Always wear goggles, helmets with chin straps, and warm protective clothing.

Never wear scarves, loose belts, or clothes that could catch on moving parts or tree limbs.

Know the traffic laws: many states prohibit using snowmobiles on public roads, many states have minimum age requirements for drivers of snowmobiles, and many states require that the vehicle be registered.

Plan your route:

Beware of hills, rocks, fences, and especially barbed wire.

Don't drive on ice because you never know how thin the ice really is.

Drive on established trails.

Support your weight on your feet, as if you were posting a horse by standing on the stirrups. This will enable you to keep better control and absorb jolts when going over bumps. Keep feet on foot rests at all times.

Lean into the turns.

Don't speed! Your brakes have to be applied slowly and evenly, just as in a car on snow-covered roads.

Use extra caution at night. Don't overshoot your headlights.

Never open new trails at night.

Avoid driving in bad weather.

Be alert because the snowmobile's noise may prevent your hearing approaching trains, cars, or other snowmobiles.

Never drink intoxicating beverages when you are driving.

Use the "buddy system" so you can help each other in case one has an accident or breaks down.

Use extra care and drive at a slower rate of speed when carrying a passenger. Snowmobiles don't have seatbelts.

Always stop before crossing a highway or railroad track.

Ecology Notes: Environmentalists are seriously concerned about adverse effects of snowmobiles. To protect the environment:

Drive a snowmobile on snow at least four inches deep so that plants underneath will not be harmed.

Never drive over bushes or small trees.

If an animal crosses your path, stop until it has moved away; never chase animals.

Historic Firsts

In 1830, the first major railroad in the United States was built. This 60-mile passenger and freight line, appropriately called the Baltimore and Ohio, ran from Baltimore west toward Ohio.

At first, railroad cars were drawn by horses. In August 1830, however, Peter Cooper came forth with a remarkable invention. His small engine, dubbed the "Tom Thumb," replaced the horses.

However, this little engine was not readily accepted by the public. Most persons insisted that horses were indeed faster.

In order to resolve the issue, a race between the locomotive and horse car was arranged. The event took place on the double-tracked road near Baltimore.

It was an exciting occasion. The gun went off, and the horses flew into the lead. Onlookers cheered. But the little engine soon put on steam and raced in front of the horse car. Suddenly, though, the locomotive sputtered to a halt. A pulley had slipped from the engine. The horse car won the race.

Answers To Equations in Last Issue

Equations by Dennis Pastorelle and George Booth
Submitted by Warren LaHeist

EQUATION (1):

$$\underset{\text{Oh}}{O(h)},\ \underset{\text{say}}{\int \alpha_y}\ \underset{\text{can you see by}}{(a_n\ U \circ c) = B_y} + \underset{\text{the}}{T \cdot h_\varepsilon} + \underset{\text{dawn's}}{\delta(a_{wn})}$$

$$\underset{\text{early}}{+(E_{ar})l_y} - \underset{\text{light}}{(l_i)_g(h_\tau)}$$

Where:

$\int$ = Calculus symbol for integration
α = Greek lower case a (alpha)
T = Greek upper case T (Tau)
ε = Greek lower case e (epsilon)
δ = Greek lower case d (delta)

EQUATION (2):

$$\underset{\text{fee}}{\Phi}\ \underset{\text{fi}}{(\Psi}\ \underset{\text{fo}}{(4)}\ \underset{\text{fum}}{\Sigma}\ \underset{\text{"ee-i,ee-i, oh"}}{(e_i)^2,\ O(h)}$$

Where:

Φ = Greek lower case ph (phi)
Ψ = Greek lower case ps (psi)
Σ = Greek upper case S (Sigma) Used in math to mean sum
$( )^2$ = This means to square whatever is inside ( ) or $(e_1)^2 = (e_1)(e_i)$

EQUATION (3):

$$\underset{\text{If I ate a pie at least once}}{\text{iff}\ \ \text{i}\eta\ \ \pi > 1}$$

Where:

iff = Math term for if
$>$ = Math term for "Greater than"
η = Greek lower case ē (eta)
π = Greek lower case p (pi)

If you enjoyed these equations, we challenge you to submit your original puzzles.

Looking Back

At the turn of the century, the U.S. had 8,000 automobiles--and 20 million horses.

Society of Automotive Engineers Journal

How Safe Were Chariots?

Warnings to drive carefully are nothing new. In the Old Testament, Nahum 2:5, you will find:

"The chariots shall rage in the streets, they shall jostle one another in the broad ways; they shall seem like torches, they shall run like the lightnings."

--Dan Bennett

The $2 Bill Is Coming Back

Don't be surprised if you soon find a $2 bill among your change. After April 13, 1976, this bill will become an integral part of the American economy. And before long, it should be as commonplace as the $1, $5 or $10 bills we're all used to.

The new $2 Federal Reserve Note will feature an engraving of Thomas Jefferson on the front. On the back will be a rendition of the John Trumball painting, "The Signing of the Declaration of Independence."

The first bulk of $2 bills (225 million) will be issued on Thomas Jefferson's Birthday (April 13). They will be available to the public from commercial banks. By July 4, 1976, a current annual order of 400 million will be available.

Over the next several years, the $2 bill will replace about half of the existing $1 bills. At present, the $1 notes make up 55 to 60% of U.S. currency produced annually. By gradually replacing a portion of the $1 bills with the $2 ones, the federal government will save an estimated 4 to 7 million dollars a year in manufacturing and related costs.

Although the new note bears a bicentennial design, it is not solely a bicentennial commemorative. The Treasury plans to issue 400 million notes each year. It will soon become an everyday piece of currency. Persons who dislike a batch of bulky

The front of the new $2 Federal Reserve Note, Series 1976, will feature Thomas Jefferson, third U.S. President and author of the Declaration of Independence. The engraving is based on a portrait painted in the early 1800's by Gilbert Stuart. On the back is a rendition of "The Signing of the Declaration of Independence." This John Trumbull painting was created during the post-Revolutionary War period. The original now hangs in the Trumbull Gallery at Yale University.

dollar bills in their wallets will find it convenient. Banks will find it economical as well. The time and expense (storage, etc.) of handling fewer pieces of currency should lower their costs.

The history of the $2 denomination dates back to 1776. It has been issued in various forms as Treasury notes, Silver Certificates, National Bank Currency and U.S. Notes.

The most recent issue of the $2 bill was the 1963A series U.S. Note. This bill bore Thomas Jefferson on its face and Monticello on the back. The last printing of this bill, which was most popular in New England and some western states, was in May 1965. In August 1966, it was officially discontinued due to lack of public demand. At the time of its discontinuance, $2 bills represented only 1/3 of 1% of the total currency outstanding.

But that was in 1966 when coffee was still a dime. A he-man's breakfast or lunch, for the most part, was less than a dollar. At today's food prices, the $2 bill should come in handy.

graffiti

Traffic Ticket:
Finale of the policeman's bawl.