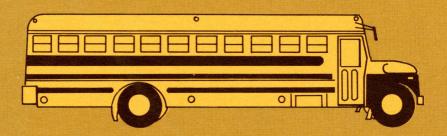
III. School buses

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# SCHOOL BUS DRIVERS HANDBOOK



IOWA DEPARTMENT OF PUBLIC INSTRUCTION

## State of Iowa DEPARTMENT OF PUBLIC INSTRUCTION

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#### PREFACE

School bus drivers must be properly qualified and well trained if we are to have a safe, efficient and economical transportation system. Driving a school bus requires special skill and knowledge.

The contents of this handbook are designed to cover day-to-day situations confronting school bus drivers in carrying out their responsibilities. The book is intended to be a guide and ready reference source, and through reading and studying it the drivers should be better prepared to cope with problems that might be encountered. It should also assist the drivers in developing proper attitudes, skills, and knowledge that are essential in being defensive and professional drivers.

We wish to thank the National Safety Council, the American Red Cross, the Arkansas Department of Education, the Minnesota Department of Education, the North Carolina Department of Motor Vehicles, the Oregon Department of Education, the Pennsylvania Department of Public Instruction, the Texas Education Agency, the West Virginia Department of Education, the Iowa Department of Public Safety, the Iowa Pupil Transportation Association, and M. M. Dockendorff, Supervisor of Civil Defense Education, Iowa Department of Public Instruction, for some of their material that is included in this manual. Our thanks, also, to the personnel in the Information and Publications Section for the art work and editing the material.

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#### THE SCHOOL BUS DRIVER

In that big yellow bus sits a man made of "steel" With his foot on the throttle and his hand on the wheel His eye, at all times, he must keep on the road To see that no danger approaches his load.

His mind, from his driving, should have no detractions By unnecessary commotion, or student's rude actions. He's your friend, dear students, so treat him as such And I'm sure he'll appreciate it very much.

Your "kids" are in school, while riding the bus So teach them, dear parents, to not raise a fuss, And if they will all be quietly seated I'm sure that each morn, with a smile they'll be greeted.

We know they are young, full of zip, vim and vigor Which makes driving problems so very much bigger. In Spring, Fall and Winter, through rain, snow, or hail We'll drive them to school and home without fail.

To those on the road, this bus is no stranger So please, Mr. Motorist, don't cause any danger To the lives of those children, so young and so fine For some may be yours and some may be mine.

Our signals are given by flashing a light An arrow means turn -- to the left, -- or the right Two flashers and sign mean STOP - without doubt While someone gets in, or someone gets out.

Don't pass when you see that bright yellow line Or you may end up with a ticket and fine. It's for your safety, too, these laws have been made But, it's left up to you to see they're obeyed. So pause in your haste, for a moment, or two For some child's life may depend upon you To stop, for an instant, till the road he has crossed Then his name won't be found among those who've been lost.

When some careless driver disregarded that sign With naught but his own selfish thoughts on his mind And drove right on by, giving no thought nor care To some Mother's children who were crossing there.

So think, Mr. Driver, as you drive down the road And see that bus driver with his priceless load Of the times you have wondered just how you would feel If you sat in that bus as the man at the wheel.

We love all those children and drive with great care We'll do all in our power, their young lives to spare. Then, for their safe keeping, give thanks to our God That not one lay sleeping, somewhere 'neath the sod.

(This is an original poem composed by Stanley J. Mouser, Wellman, Iowa, 52356, R.F.D. 1, bus driver for the Mid-Prairie Schools.)

#### I. DEFINITION OF A SCHOOL BUS

- A. A "School Bus" is any vehicle operated for the transportation of children to or from school, except vehicles which are:
  - 1. Privately owned and not operated for compensation.
  - 2. Used exclusively in the transportation of the children in the immediate family of the driver.
  - Operated by a municipally or privately owned urban transit company for the transportation of children as part of or in addition to their regularly scheduled service.
  - 4. Designed to carry not more than nine persons as passengers, either school owned or privately owned, which are used to transport pupils to activity events in which the pupils are participants or used to transport pupils to their homes in case of illness or other emergency situations. The vehicles operated under the provisions of paragraph "4" of this section shall be operated by employees of the school district who are specifically approved by the local superintendent of schools for the assignment.

#### II. SCHOOL BUS DRIVER QUALIFICATIONS

## A. License Requirements

Section 321.376, Code of Iowa, requires the driver of every school bus to have:

- 1. A regular or special chauffeur's license issued by the Iowa Department of Public Safety.
- 2. A School Bus Driver's Permit issued by the Iowa Department of Public Instruction. Application for this permit must be made on forms prescribed by the department.

## B. Age Requirements

#### School Bus Drivers must:

- 1. Be at least eighteen years of age, unless such person has successfully completed an approved driver education course, in which case, the minimum age shall be sixteen years.
- 2. Be not more than 65 years of age as of August 1, preceding the opening of the school year. The Department of Public Instruction may, at its discretion, waive the upper age limit upon application of the board of education and receipt of evidence of satisfactory physical condition of the driver.

#### C. Other Qualifications

Section 321.375, Code of Iowa, provides that drivers of school buses must:

- 1. Be physically and mentally competent.
- 2. Not possess personal or moral habits which would be detrimental to the best interests of safety and welfare of the children transported.
- 3. Have an annual physical examination and meet all established standards for physical fitness.

(This section also provides that the use of alcoholic beverages or immoral conduct on the part of the driver shall automatically cancel his/her contract and re-employment for the balance of the year is prohibited.)

#### III. DRIVER - ADMINISTRATION RELATIONSHIP

## A. Driver's Relationship with others on the School Staff

1. The school bus driver must be aware of the close relationship existing between the general education program and the transportation program.

- 2. The school bus driver does not work independently. He, like every other employee in the school system, must work within the policies of the school as established by the board.
- 3. The school bus driver must at all times work in close cooperation with the superintendent, principal, and/or the transportation supervisor if the district employs one.
- 4. The school bus driver shall report dangerous situations at stop locations and other route hazards so that corrective action can be taken by the administration.
- 5. The school bus driver shall report all violators of the "School Bus Stop Law".

# B. Rules and Regulations Governing Driver's Conduct and General Behavior

- 1. Section 285.5, Code of Iowa, requires the bus driver to have an official contract with the local board of education. Under this contract the driver agrees:
  - a. To conform to all rules of the board of education in and for said district adopted for the protection of the children and to govern the conduct of the person in charge of said conveyance.
  - b. To make such reports as may be required by the State Department of Public Instruction, County Board of Education, or Superintendent of Schools.
  - c. To conform to all standards for operation of the school buses as required by statute or by legally constituted authorities.
  - d. To take bus to school bus inspection when held under auspices of the Division of Transportation, Department of Public Instruction, without further cost to the board.
  - e. To attend a county or regional school of instruction for bus drivers when called by the State Department of Public Instruction, Division of Transportation.

- f. That the party of the second part can terminate his contract and dismiss the party of the first part for any inattention to duty, use of intoxicating liquors, immoral conduct, incompetency, or for any other good cause.
- g. That his contract shall not be in force until driver presents official School Bus Driver's Permit.
- 2. Section 285.5, Code of Iowa, provides that the use of alcoholic beverages or immoral conduct shall automatically cancel the contract.
- 3. A driver should refrain from the use of tobacco while driving the bus.
- 4. The school bus driver is obligated to obey any additional rules adopted by the local board of education.

## C. Job Description

There are certain duties that all school bus drivers are required to perform. These include:

- 1. Operating the vehicle in a safe and efficient manner.
- 2. Conducting pre-trip and post-trip checks on the vehicle and its special equipment.
- 3. Establishing and maintaining rapport with passengers.
- 4. Maintaining discipline among passengers.
- 5. Meeting emergency situations in accordance with standard operating procedures.
- 6. Communicating effectively with school staff.
- 7. Maintaining efficient contact with the public.
- 8. Completing required reports in the prescribed manner.
- 9. Satisfactorily completing required training programs.

## D. Evaluating the Bus Driver's Performance

When the transportation supervisor rides the school bus for purposes of observation, he will observe the following actions:

- 1. Did the driver check his bus properly before boarding?
- 2. If the engine was cold, did the driver warm it up properly?
- 3. Did the driver sit up in proper driving position?
- 4. Did he orient himself properly in the driver's seat before taking off?
- 5. Was he alert to conditions outside the bus?
- 6. Did he test his brakes before pulling into traffic when leaving the parking area?
- 7. Did he use proper signals before making a turn?
- 8. Did he get into the proper lane before making a turn?
- 9. Did the driver "ride" the clutch?
- 10. Did he "lug" the engine?
- 11. Did he show skill in down shifting?
- 12. When stopping to load or unload pupils, did he use his warning lights approximately 300 feet before stopping?
- 13. Were stops made properly at railroad grade crossings?
- 14. Did the driver use good judgment in passing other vehicles?
- 15. Did the driver use brakes properly in bringing the bus to a stop?
- 16. Did the driver allow plenty of room when following other vehicles?
- 17. Did he check traffic before opening door to discharge pupils?
- 18. When pupils had to cross the road did the driver, after stopping the bus on the highway and ascertaining that the way was clear, signal pupils across the road in front of the bus?
- 19. Did the driver make sure that all was clear before backing at a turn-around?
- 20. Did the driver maintain good discipline?
- 21. Did the driver carry on unnecessary conversation?
- 22. Did the driver observe safe speed limits?
- 23. Did the driver fasten his seat belt?

In addition the supervisor will:

- 1. Observe condition and appearance of driver.
- 2. Observe condition of bus and equipment.
- 3. Note driver attitude toward other motorists and pedestrians.

#### IV. DRIVER - PUPIL RELATIONSHIPS

#### A. Influence of Driver Personality and Character

- 1. The bus driver is responsible for supervising and controlling pupils on the route. He cannot escape the fact that he is in charge. For this reason, the driver must know and clearly understand all rules and regulations concerning pupil behavior.
- 2. To be entirely successful, the driver must effectively guide the general behavior of these children and he must also exert a positive, beneficial influence.
- 3. It is an established fact that pupils learn from the driver. Pupils will usually react favorably to such personal qualities as a firm but pleasant bearing, good grooming (personal and school bus), a well controlled even temperament, honesty, integrity, courtesy and orderliness.

## B. Tips on Handling Children

The school bus driver should:

- 1. Show the children that he cares for them.
- 2. Look for the good qualities all children have some.
- 3. Never give an order he does not mean to enforce.
- 4. Not punish all passengers for the behavior of one rider.
- 5. Let the pupils sit with their friends, if possible.
- 6. Learn the children's names and greet them each morning and evening.
- 7. Show a sense of humor, but be able to control it.

- 8. Remember that he is dealing with children not adults.
- 9. Show an interest in the children and their school.
- Answer any questions that may be asked sensibly and intelligently.
- 11. Try to solve any problems he has with the pupils without going to school authorities or parents.
- 12. Listen to suggestions.
- 13. Set a good example by his conduct, dress, and by obeying the "rules of the road".
- 14. Be patient. It takes great patience when there is a large group of healthy, lively youngsters.
- 15. Never threaten and never bribe.
- 16. Avoid comparing one child's behavior with another.
- 17. Be consistent and make sure the punishment fits the misdeed.

## C. Desirable Pupil Behavior

Formal classroom behavior need not be required of pupils in a school bus. An informal atmosphere which encourages pupils to relax and enjoy the ride is desirable. There are, however, certain limits within which pupil activity must be confined. Driver and school control over pupils should be sufficient to assure that pupils will:

- 1. Remain quiet enough not to distract the driver.
- 2. Refrain from shouting and other boisterous activity.
- 3. Refrain from talking to the driver while the bus is in motion.
- 4. Show due consideration for the bus driver and his problems.
- 5. Go directly to their seats upon entering the bus.
- 6. Remain seated while the bus is in motion.
- 7. Not, wantonly or carelessly, destroy property.
- 8. Keep sharp objects off the upholstery.
- 9. Keep feet off the seats.
- Not extend arms or other parts of the body out through the windows.

- 11. Not throw objects about in the bus nor out through an open window.
- 12. Place books and other belongings out of the way of other passengers.
- 13. Keep the aisle clear.
- 14. Not shoot "paper-wads" or other material in the bus.
- 15. Remain completely quiet at all railroad grade crossings.
- 16. Follow the bus driver's instructions promptly and cheerfully.

## D. Discipline Procedures

- 1. A bus driver must **never** put an unruly pupil out of the bus to force him to walk home. Correct procedure calls for the driver to tell the pupil when he disembarks from the bus **at his home** that it will be necessary for the pupil and his parents to make acceptable arrangements with the superintendent before he or she can be transported again. The driver should report the incident to the proper school officials who in turn should notify the parents.
- 2. The bus driver should report behavior problems to his supervisor, and he should ask for assistance when it appears necessary. Behavior problems can usually be solved by:
  - a. Discussing the problems with the supervisor.
  - b. A conference between the pupil and his teacher.
  - c. Enlisting the assistance of the parent.
  - d. Changing the pupil's seat.

#### V. DRIVER - PUBLIC RELATIONSHIPS

#### A. The General Public

The bus driver is on the front line in the field of public relations. The opinion of the general public and many parents concerning the school system is often based on the efficiency of the school bus service. If well-maintained buses driven by congenial, safe drivers make their stops on schedule, the entire school system enjoys a good reputation, regardless of other aspects of the operation. A few acts of courtesy by the driver is a very effective public relations tool. In general terms, courtesy is merely practicing the Golden Rule. A few simple courteous acts are:

- 1. Slowing down when passing through pools of water to avoid splashing cars or pedestrians.
- 2. Waiting patiently for elderly or confused pedestrians to clear an intersection.
- 3. Keeping engine noise down.
- 4. Waiting behind a confused motorist without showing impatience by leaning on the horn.
- 5. Avoiding the "blocking" of other vehicles when parking the bus.

#### B. Parents

- 1. There is a very definite value in the bus driver knowing the parents of the pupils who ride the school bus. He should contact them and build a feeling of friendship. They are interested in their children and will appreciate knowing the driver who is transporting them to and from school. If they feel the driver is interested in attempting to do his job in the safest possible manner, they will cooperate with him when problems arise.
- 2. The bus driver can improve his relationship by adhering to the following suggestions:
  - a. If a pupil becomes sick on the bus, the driver should report the incident to the parents.

- b. If the driver knows that the bus will be late on a certain day he should notify the parents so they will not be worried about their children.
- c. The driver should not go to the parents with every little problem of discipline that arises, but if he finds that any problem is becoming serious and feels that an important step must be taken, then the parents should be contacted.
- 3. School authorities and bus drivers should enlist the cooperation of parents since they also have responsibilities in the transportation program. Their responsibility requires them to:
  - a. Cooperate with school authorities in promoting efficient service. Parents should not expect the bus to be operated over roads that are not properly maintained or on roads where adequate turn-arounds are not provided.
  - b. Have children at the bus stop on time.
  - Use their influence in getting roads improved or hazards removed.
  - d. Make suggestions in writing to the school authorities for the improvement of the transportation service.
  - e. Understand that all pupils riding on school buses must obey the rules of conduct or face disciplinary action.

#### C. Motorists

- 1. The school bus driver should be courteous and tolerant toward other users of the highway.
- 2. School bus drivers should be especially careful not to block traffic unnecessarily. Every effort should be made to permit the normal flow of traffic without endangering the safety of the passengers.

- 3. The number of stops should be limited on a busy highway where the homes of pupils are close together.
- 4. The bus driver should also use good judgment in relation to oncoming traffic prior to stopping for the purpose of discharging or picking up passengers. If it can be done safely, he should permit on-coming traffic to pass before activating the red flashing warning lights and extending the stop arm. Certainly he should not use this equipment in front of an on-coming driver who is too close to stop safely in time.
- 5. The school bus driver should practice courteous acts such as:
  - Waiting for a good opening before entering a stream of traffic.
  - b. Yielding to avoid an accident or a close call, even though he has the right of way.
  - c. Stopping and making a break in traffic to permit a vehicle to enter the road from a driveway if there is no danger of a rear end collision.
  - d. Dimming head lights first when meeting traffic at night.
  - e. Dimming head lights when following closely at night.
  - f. Activating turn signals in sufficient time to warn motorists who are following.

#### VI. VEHICLE CARE, MAINTENANCE AND INSPECTION

- 1. The driver has a responsibility for keeping his bus in a clean and sanitary condition. The reasons for this are:
  - a. To safeguard the health of the pupils.
  - b. To reduce the possibilities of accidents among the passengers that might be caused by falling, tripping over objects, or slipping on the floor.

- c. A clean bus induces a better attitude among the students. If the driver takes pride in keeping his vehicle clean, the children will more likely respond in the same manner.
- d. To prolong the life of the bus.
- e. To create a favorable impression of the school system to the parents and the public in general.

### 2. Suggested Schedules for Cleaning the School Bus

- a. Daily schedule
  - (1) Sweep floor and steps.
  - (2) Dust seats after sweeping.
  - (3) Clean both sides of windshield, rear view mirrors, lamp lens and reflectors oftener than daily, if necessary.
  - (4) Inspect and clean or dust windows after sweeping.
  - (5) Report the presence of fumes and gases.
  - (6) Check the operation of the emergency door.
- b. Weekly Schedule
  - (1) Wash floor, using a mop and disinfectant.
  - (2) Scrub all wood and metal parts of seats, rods or hand rails with soap and warm water.
  - (3) Wash all windows and sills and report any damages. Check operation of windows.
  - (4) Clean the seats and inspect and report any damage.
  - (5) Clean interior lights if necessary.
  - (6) Wipe off those surfaces on the inside of the bus that have not otherwise been cleaned.
- 3. The bus driver has a responsibility in the preventive maintenance program. He is on the road with the vehicle for several hours each day so he is in a position to

observe its performance under all conditions. He should learn to recognize defects and immediately report the symptoms to the maintenance department. He should not attempt to diagnose the trouble but should report what he hears, sees, smells, and feels. Remember, defects cannot be repaired if they are not reported.

- 4. Before starting his day's work, the bus driver should inspect his vehicle. Waiting until the bus is in motion or pupils are loaded could be too late and extremely hazardous.
  - a. The following daily inspection is recommended: Check: (Prior to starting bus)
    - (1) Tire pressures.
    - (2) Radiator water level.
    - (3) Crankcase oil level.
    - (4) All lights and reflectors for operation and cleanliness.
    - (5) Windshield and all windows for cleanliness.
    - (6) Emergency door latches and warning signal working properly.
    - (7) Rear-view and cross-view mirrors (adjusted properly).
    - (8) Horn.
    - (9) School Bus Signs.
    - (10) Service door.
    - (11) Auxiliary equipment flags, flares, fusees, fire extinguisher, first aid kit and hand axe.
  - b. Check: (After starting the engine)
    - (1) Windshield wipers and washers.
    - (2) Oil pressure gauge working satisfactorily.
    - (3) Temperature gauge working satisfactorily.
    - (4) Ammeter or Voltmeter charging satisfactorily.
    - (5) Heaters and defroster fans.

- (6) Motor functioning properly.
- (7) Brakes (Foot and Park).
- (8) Muffler and exhaust system.
- (9) Stop Arm.
- (10) Vacuum gauge.
- (11) Fuel gauge.

# VII. OPERATING PROCEDURES FOR RECEIVING AND DISCHARGING PUPILS

## A. General Operating Rules

- 1. In order to have the legal right to stop on the highway as described in Section B following, a vehicle must have complete school bus equipment; that is, flashing warning lamps, stop arm, school bus signs, school bus chrome color, etc.
- 2. Small vehicles used as school buses and not equipped as listed in the preceding paragraph cannot stop on the traveled portion of the roadway.

## B. School Bus Driver's Responsibilities

- 1. The driver shall turn on flashing warning lamps at least 300 feet but not more than 500 feet from the point where pupils are to be received or discharged from the bus.
- 2. The driver shall bring the vehicle to a complete stop in the far right lane of the roadway parallel to the centerline. (The lane nearest the right side of the roadway)
- 3. The driver shall disengage gears by shifting gear shift lever into neutral position or selector into neutral or park position.
- 4. The driver shall then turn off the amber flashing warning lamps, turn on the red flashing warning lamps, and extend the stop arm. When discharging passengers, the driver shall keep the pupils in the bus until he is certain that a safe traffic situation exists.

- 5. After the pupils are discharged from the bus, or prior to boarding the bus, the driver shall signal to the pupils when it is safe for them to cross the road.
- 6. The driver must not put his bus in motion until he is certain that **all** discharged pupils have reached a point of safety or the pupils boarding the bus are seated.
- 7. The driver shall then turn off all flashing warning lamps, retract the stop arm and proceed on the route.
- 8. The driver **shall not** use the flashing warning lamps and the stop arm in "business" and "residence" districts where the speed limit is 35 miles per hour or less unless the city or town has an ordinance permitting the use of same.

## C. Pupil Responsibilities

- 1. Pupils shall enter or leave the school bus from the right front entrance of the bus.
- 2. If pupils must cross the roadway, they must pass in front of the bus but no closer than 10 feet, look in both directions, and proceed to cross the highway only on signal from the bus driver.
- 3. Pupils who are being discharged shall remain in their seats until the bus has come to a complete stop.
- 4. After boarding the bus, pupils should go directly to their seats.
- 5. Pupils should be at the loading stations before the bus arrives as a school bus has no legal right to "sit" on the highway waiting for tardy pupils.
- Pupils shall not stand in the roadway when waiting for a school bus.

## D. Motorist Responsibilities

1. The driver of any vehicle when **meeting** a school bus on which the amber warning lamps are flashing shall reduce the speed of said vehicle to not more than twenty miles per hour, and shall bring said vehicle to a complete stop

- when school bus stops, the red warning lights are flashing, and stop arm is extended. Said vehicle shall remain stopped until stop arm is retracted and the flashing warning lights are deactivated after which driver may proceed with due caution.
- 2. The driver of any vehicle **overtaking** a school bus shall not pass a school bus when **red or amber warning signal lights** are flashing and shall bring said vehicle to a complete stop not closer than fifteen feet to the school bus when it is stopped, the red warning lights are flashing, and stop arm is extended, and shall remain stopped until the stop arm is retracted, the flashing warning lights are deactivated and the school bus resumes motion, or until signaled by the driver to proceed.
- 3. The driver of a vehicle upon a highway providing two or more lanes in each direction need not stop upon meeting a school bus which is traveling in the opposite direction even though said school bus is stopped.

#### VIII. TRAFFIC LAWS AND REGULATIONS

#### A. General

- No vehicle shall overtake and pass another vehicle when approaching within 100 feet of any narrow bridge, viaduct, or tunnel, when so signposted, or when approaching within 100 feet of or traversing any intersection or railroad grade crossing.
- 2. The driver of a motor vehicle shall not follow another vehicle more closely than is reasonable and prudent, having due regard for the speed of such vehicle and the traffic upon and the condition of the highway. (Distance from vehicle ahead should be not less than one bus length for each 10 miles per hour or 3-5 seconds behind).

- 3. A signal to turn right or left must be given continuously during not less than the last 100 feet traveled by the vehicle before turning when the speed limit is 45 miles per hour or less. When the speed limit is in excess of 45 miles per hour, a continuous signal must be given during not less than the last 300 feet.
- 4. Where two vehicles are approaching on any street or highway so that their paths will intersect and there is danger of collision, the vehicle approaching the other from the right shall have the right of way.
- 5. The driver of a vehicle within an intersection intending to turn left shall yield the right of way to all vehicles approaching from the opposite direction which are so close to constitute an immediate hazard, then said driver, having so yielded and having given a signal may make such left turn.
- 6. The driver shall not operate a vehicle on a highway in reverse gear unless and until such operation can be made with reasonable safety, and shall yield the right of way to any approaching vehicle which is so close to constitute an immediate hazard.
- 7. Upon the immediate approach of an authorized emergency vehicle which is displaying a red light or the driver is giving audible signal by siren, whistle, or bell, the driver of every other vehicle shall yield the right of way and shall immediately drive to the right hand curb and stop.
- 8. Every motor vehicle upon any highway must display lighted head lamps from sunset to sunrise and at other times when conditions such as fog, snow, sleet or rain provide insufficient lighting to see persons or vehicles on the highway at a distance of 500 feet.
- 9. The driver of a vehicle approaching an oncoming vehicle within 500 feet shall use low beam headlights.
- 10. The driver of a vehicle following another vehicle within 200 feet of the rear, except when engaged in the act of overtaking and passing, shall use low beam headlights.

11. No person driving a motor vehicle shall permit it to stand unattended without first stopping the engine. If vehicle is standing on any perceptible grade the brake must be set and the front wheels turned to the curb or side of the highway.

## B. Procedures at Railroad Grade Crossings.

#### 1. General Rules

- a. The driver of a school bus must, before crossing a grade of any track or tracks of a railroad, bring his bus to a full and complete stop within not less than 10 feet or more than 50 feet from the rails nearest the front of the bus. Twenty-five (25) feet is the preferred distance.
- b. Stops should not be made between multiple tracks if, by doing so, the rear portion of the bus extends over another track.
- c. Drivers shall carefully observe traffic and reduce speed, far enough in advance of stop, to avoid trapping other motorists in panic stops or rear-end collisions with the bus. This can be done by tapping brake pedal.
- d. On multiple-lane roadways, no stop shall be made in the center or left-hand lane. On this type of roadway, drivers should strive to be in the right-hand lane when the stop for the railroad grade crossing is made.
- e. The flashing warning lights **shall not** be activated while the bus is stopping or is stopped for railroad grade crossing.
- f. The driver when completely stopped shall fully open the service door and must, after so stopped, listen and look in both directions along the tracks for approaching engines, trains, or cars. Upon resumption of motion, the service door shall be closed.

- g. For improved vision and hearing, a window at the driver's left should be opened and all noisy equipment (fans, radios, etc.) should be shut off until the bus has cleared the crossing.
- h. Drivers shall always cross in such gear as will not require changing gears while traversing a crossing and shall never shift gears when the bus is actually crossing the tracks.
- i. In the event a train has passed over the crossing, the driver **shall not** drive his bus onto said track or tracks until such train has sufficiently cleared the crossing so that the driver is certain that no train, hidden by the first train, is approaching the crossing on an adjacent track.
- j. Always wait for an approaching train. Do not attempt to judge speed and distance when train is approaching.

## 2. At Crossings Controlled by Signals Only:

- a. In addition to the General Rules, the driver of a school bus which has stopped at any railroad grade crossing at which there is in operation any flashing red lights and/or bell shall not proceed across such tracks unless authorized to do so by a law enforcement officer.
- b. If switching operations or stopped trains delay the use of the crossing unnecessarily for frequent or extended periods of time, a complaint should be made through proper channels to railroad management and traffic authorities.

## 3. At Crossings Controlled by Crossing Gate or Barrier

a. No driver shall drive his bus through, around, or under any such crossing gate or barrier at a railroad grade crossing while such gate or barrier is closed or is being opened or closed.

b. The driver must never accept a lack of movement as indicating the device is either in or out of order or not properly handled, but must always accept the fact that a railroad grade crossing is a potential danger and must not cross the tracks until he has conclusively determined that no train is approaching.

#### 4. Behavior of Passengers

When any school bus must stop at any railroad grade crossing, all passengers must remain silent until crossing is completed. The signal for silence shall be given by the driver in whatever manner he deems suitable.

## C. Speed Limits for School Buses

- 1. A school bus shall not travel at a rate of speed in excess of the posted limits if that limit is less than the limits set forth in the following paragraphs.
- 2. On any interstate highway system or four-lane primary highway, the speed limit is sixty (60) miles per hour.
- 3. When operated on all other roads, the maximum speed is fifty (50) miles per hour when the bus is used on educational or extra-curricular activity trips and forty-five (45) miles per hour at all other times.

## D. Time Schedule

- 1. A time schedule should be posted in the bus, and it is the driver's responsibility to operate his bus according to the schedule. There is no required time for a bus to wait and the policy of waiting is not recommended. To wait for one pupil means that other pupils will have to wait for the bus.
- 2. If the bus is ahead of schedule, the driver should pull the bus completely off the highway, all flashing warning lamps turned off and the stop arm retracted. If the bus is consistently ahead of schedule the schedule should be revised and the parents notified of the changes. It is as inefficient to be ahead of schedule as behind schedule.

#### IX. SAFE OPERATING PROCEDURES

## A. Emergency Conditions

Adverse driving conditions place special responsibilities on the school bus driver. They lengthen the stopping distance or danger zone. A cardinal rule for the driver to follow in these situations is to reduce speed and to adapt driving habits to the weather and road conditions.

## B. Ice and Snow

In operating on ice and snow the driver should cause the vehicle to move at a slow and steady rate of speed. To avoid spinning the wheels, less power should be applied to the drive-shaft. The bus should be operated in third gear and the following points should be observed:

- 1. Engage the clutch very slowly.
- 2. Accelerate slowly and steadily.
- 3. Apply brakes slowly and intermittently.
- 4. Approach all curves slowly.
- 5. Do not disengage the clutch until the bus is almost stopped.
- 6. In case the bus begins to skid, the driver should:
  - a. Keep himself under control.
  - b. Steer in the direction in which the rear end is skidding. (If rear end skids to the right, turn the front wheels to the right). As the bus begins to straighten, the front wheels should also be straightened.
  - c. Avoid braking. If it is necessary to brake, it should be done by tapping the brake pedal intermittently, being careful not to lock the wheels.
  - d. Keep the clutch engaged.
  - e. Avoid oversteering.
  - f. Avoid releasing the accelerator suddenly.

## C. Rain, Fog, and Smoke

These conditions usually result in poor visibility, but they also frequently cause slippery road conditions. Drivers should be alert to slippery conditions at the start of a rain before it has had time to wash off oil, soil and other materials. The following precautions should be observed when operating under these conditions:

- 1. Reduce speed of bus.
- 2. Drive well to the right hand edge of the road.
- 3. Watch side roads closely for entering traffic.
- 4. Beware of patches of wet leaves and smooth blacktop surfaces.
- 5. Never look directly at lights of oncoming vehicles.
- 6. In fog, use windshield wipers and defrosters continuously.
- 7. In fog, drive with headlights on low beam.
- 8. Avoid sudden stops. Signal stops by tapping brake pedal to make the stop lights blink.

## D. Right and Left Turns

In order to provide the maximum degree of safety in making turns, it is first necessary to maneuver the bus into the correct position. For a right turn the bus should be close to the right-hand curb, and for a left turn, in the lane nearest the center of the road. The driver should be able to anticipate most of the turns he will be required to make well in advance and place his bus in the proper position.

- 1. Right Turns.
  - a. Check mirrors for movement of other traffic.
  - Signal properly and maneuver bus into appropriate lane.
  - c. Signal intention to turn 100 or 300 feet in advance of turn. (The law requires this distance to be 300 feet where the speed limit is more than 45 miles per hour.)

- d. Slow down to under 10 miles per hour. For safety and comfort the speed should be reduced before the turn is started.
- e. Shift to the proper gear prior to making the turn to make certain that the turn will be completed without stalling.
- f. Start the turn when the front wheels are slightly past the curb of the street into which the turn is made.
- g. Turn the steering wheel so that the vehicle will be in the correct lane when the turn is completed.

Many school bus drivers, particularly those operating larger buses, have a habit of steering away from the turn, and then turning in the direction intended. This is a dangerous practice as it may carry the wrong impression to the driver immediately following, and he may try to pass on the right thinking fhe bus is going to make a left turn. Pulling to the left is not necessary if the bus is properly positioned before starting the turn. Another common fault is starting to turn too soon. The driver should proceed straight ahead until the front wheels of the bus are clear of the curb, and then by turning sharply to the right, the turn can be made without striking the curb and without swinging wide.

#### 2. Left Turns

Due to the necessity of crossing a lane of traffic, left turns are more dangerous and more difficult than right turns. To assure the maximum degree of safety, the driver should always use the following procedure in making left turns:

- a. Check mirrors for movement of other traffic.
- b. Place bus in inner lane or next to center line and signal turn 300 feet before reaching the intersection.

- c. Be alert to special signs regarding left turns.
- d. Proceed on signal or when the intersection is clear of oncoming traffic or pedestrians.
- e. Do not cut corners too short or too wide.
- f. Complete turn in right hand lane nearest the center line.
- g. On one way streets, turn from and into extreme left hand lane lawfully available.

The driver should shift to first or second gear (depending on type of vehicle) before entering the turn and no shift in gears should be made until after turn is completed.

## E. Turning Around

Turning a school bus around is always a hazardous procedure. The best way to do it is to drive around the square (block or section) if it is possible.

- 1. Using side road on the right (recommended).
  - a. Check mirrors for movement of other traffic.
  - b. Signal turn 300 feet before reaching intersection.
  - c. Pull over to curb and stop with rear wheels just beyond side road to be used.
  - d. Shift into reverse, check traffic and utilizing a monitor or patrol boy at rear of the bus, if one is available, back into side road. Steering wheel should be turned sharply to the right just as the wheels reach the intersection.
  - e. When bus has been properly positioned in side road, signal left turn, shift into first gear, check traffic in both directions and pull across into right hand lane nearest the center.
- 2. Using side road on left.
  - a. Check mirrors for movement of other traffic.

- b. Signal left turn, pull into right hand lane nearest center line 300 feet from intersection.
- c. Slow down or stop with front wheels approaching intersection, shift into first gear, check traffic moving in opposite direction and pull into side road on left when traffic permits.
- d. Pull into side road just far enough so that the rear end of the bus does not protrude into main highway or road to be backed into.
- e. Shift into reverse, and, utilizing monitor or patrol boy in rear of bus, back onto main highway, when traffic is clear. Turn steering wheel sharply to the right at the point when the rear wheels of the bus reach the edge of the road that the bus is being backed into.

## 3. Making U-turn. (Not recommended)

- a. Pull to the far right of the highway and stop, utilizing proper signaling procedure.
- b. Give signal for left turn, observe traffic, remembering that all traffic has the right-of-way over the turning vehicle.
- c. Shift into low gear and proceed to turn when it will not interfere with traffic.
- d. Do not shift gears while turn is being made.
- e. Maneuver bus into proper lane and proceed in the desired direction.

## F. Backing

Backing a school bus is a dangerous practice and should be avoided if possible. If a bus must be turned around the safest way to do so is to drive around the square (block or section). If it is necessary to back in order to complete a turn, it should be done where there is very little traffic. Backing onto main highways, streets and on down grades should be avoided. The following procedures are recommended when necessary to back the bus:

- 1. Station a monitor or patrol boy at the rear of the bus to aid the driver.
- 2. If no monitor is available, get out of the bus and check to determine if any obstacles are present.
- 3. Shift into reverse and proceed to back at a slow even speed.

In a school bus, it is difficult for the driver to see the area behind the bus adequately; therefore, there is always danger involved when a school bus is being backed. The school bus should never be backed on the school grounds where small children may be present. The safety conscious driver will never back a school bus unless it is absolutely necessary. In most cases it is possible to find a method whereby backing a school bus may be avoided, especially if there are students on the bus.

## X. DEFENSIVE DRIVING TECHNIQUES

- A. A large percentage of all traffic accidents could be avoided if every driver applied defensive driving techniques. By driving defensively, the school bus driver can compensate for the bad manners, poor attitudes, mistaken judgment and carelessness of other drivers. He must be aware of road, weather and vehicle conditions and adjust his driving accordingly.
- B. The school bus driver should develop good seeing habits by practicing the principles of the "Smith System of Driving". These are:
  - 1. Aim high in steering.
  - 2. Get the big picture.
  - 3. Keep your eyes moving.
  - 4. Make sure they see you.
  - 5. Leave yourself an out.

- C. The school bus driver must recognize and know how to avoid hazardous situations arising from:
  - 1. Acts of Others.

The school bus driver should never gamble on the other driver doing the right thing. He must learn to recognize danger signs early and to "leave himself an out" so that when the other fellow "pulls a boner" he can avoid him.

2. Weather Conditions.

The school bus driver must adjust his driving to the hazardous conditions caused by fog, rain, snow, smoke or dust. He must drive at a reasonable speed, keep his windshield clear, get all the light possible from his lamps and signals, see that his brakes are in good order as he begins the trip, and he must increase the normal distance between his bus and the vehicle ahead.

3. Road Conditions.

The school bus driver must be alert to detect day to day changes in road conditions. Chuck holes develop overnight, the grade washes away, shoulders become soft, loose gravel appears and slick spots develop through accumulations of ice and snow so it is important that the driver adjust his driving to the new conditions by slowing down.

4. Vehicle Condition.

The school bus driver should know his bus rather intimately. He should get the "feel" of it early in the school year and be quick to detect changes in the way the bus operates. Such changes may indicate repairs are due. Daily inspection is necessary to maintain a safe vehicle.

5. His Own Deficiencies.

The school bus driver should be aware of his own weak points in the driving situation. He should never drive if he feels faint or dizzy, and he should develop a mental alertness to combat the lack of skill or other shortcomings he might have.

#### D. Route Hazards

Sound safety procedures in connection with specific route hazards must be practiced by the school bus driver.

#### 1. Road Intersections.

Approximately one-fourth of the school bus accidents in Iowa occur at intersections. Too many drivers insist on the legal right of way, but you can't always be sure the other driver will give you the right of way. The school bus driver should:

- a. Approach all intersections with his foot off the accelerator and on the brake pedal.
- b. Look first to the left and then to the right before entering the intersection.
- c. Never assume the right of way until his judgment says it is safe.
- d. Be prepared to stop if the other vehicle is moving into the intersection.
- e. Be alert at all driveway entrances.
- f. Check traffic front and rear and signal properly before making right or left turns. Quite often a right turn and a journey around the block is the safest way to make a left turn.
- g. Never attempt to pass other vehicles at or within 100 feet of an intersection.
- h. Take time to be safe at all intersections.

## 2. Narrow Roads and Bridges.

To avoid accidents at these hazards, the school bus driver should:

a. Never insist on the right of way when meeting traffic on narrow roads. He should stop when it appears safer to do so and let the other motorist proceed before resuming motion. He must also be aware of soft shoulders.

- b. Never meet or pass another vehicle on a bridge. If something goes wrong, the only way out is over the side of the bridge. The bus driver should wait for an approaching vehicle to clear unless he has ample time to cross before meeting it.
- c. Not inconvenience following traffic more than is necessary. The bus driver should slow down or stop and let the motorist proceed when it is safe and convenient.

#### Turns and Curves.

When approaching turns and curves on country roads or highways, the school bus driver should:

- a. Reduce the speed of the bus before entering the turn or curve.
- b. Slow down because the force of turning will pull the bus off the roadway onto the shoulder resulting in the bus being out of control.
- c. Have a firm grip on the steering wheel because the centrifugal force (a law of nature) will force the bus sideways.
- d. Remember the speed at which the bus can be driven safely on a curve depends, in part, on the amount of side-slope or the sharpness of the roadway.
- Never attempt to pass other vehicles on a turn or curve.
- f. Be traveling slowly enough to take the turn comfortably and safely.

#### 4. Hills

The school bus driver should:

a. Never attempt to pass another vehicle when approaching the crest of the hill.

- b. Slow down when approaching the crest and be prepared to find the unexpected when he arrives at the top.
- c. Keep well to the right.
- d. Gear down just before descending steep grades. A safe rule to follow is to use the same gear to descend a hill as would be required to ascend the same hill.
- e. In parking on a downgrade, cramp the front wheels sharply toward the curb. On an upgrade on a street with a curb, cramp the front wheels sharply away from the curb. On an upgrade with no curb, cramp front wheels toward the roadedge, so if the bus should move, it will back away from traffic. In any case, set the park brake and leave transmission in reverse gear or lowest gear depending on type of transmission.

## E. Stopping Distances

The school bus driver must recognize the fact that his vehicle can't "stop on a dime". He must realize the bus will travel a considerable distance while he is making his decision and puts his foot on the brake pedal. This is called reaction distance and it increases significantly with the speed. The average reaction time is 3/4 ths of a second. The figures listed in the following chart are based on a reaction time of one second and ideal weather and road conditions. A slower reaction time, inclement weather, and poor road conditions will increase the total stopping distance that is shown in the chart on the following page.

# MAXIMUM SAFE STOPPING DISTANCE FOR TRUCKS AND BUSES

(In accordance with ICC regulations)

Speed Miles Per Hour	Speed Feet Per Second	Vehicle Travels During Reaction Time (One Second)	Braking Distance	Total Stopping Distance In Feet
20	29	29	30	59
40	59	59	120	179
60	88	88	270	358
Speed of vehicle	Feet covered per second	Feet traveled between time danger is seen and time brake is applied.	Distance required to stop after brake is applied.	Total feet covered after seeing danger. (Reaction time plus braking distance)

Remember - Drive Right if you want to be Left

#### XI. ACCIDENT BEHAVIOR

There are a number of things which need to be done quickly after an accident. The order and number will vary somewhat in terms of the location of the vehicles after the accident, the severity of the accident and the extent of injuries. The bus driver must know what has to be done and how to do it. If he is to control events after an accident, he must keep calm so he can judge the situation accurately and proceed with a minimum of delay. In some situations the bus driver can avert tragedy by proceeding with speed and precision.

A. In the event of an accident while transporting pupils, the school bus driver's first responsibility is for the care of his passengers. This responsibility involves:

- 1. Moving the bus, if possible, to the side of the road to avoid obstructing traffic.
- 2. Turning off ignition.
- 3. Preventing or extinguishing fire.
- 4. Removing passengers from bus to safe location.
- 5. Protecting scene of accident and the passengers by placing flags, flares and fusees.
  - a. If accident occurs during the period when lighted lamps are required, a lighted fusee must be placed on the roadway at the traffic side of the vehicle. In addition, three red reflector flares must be placed on the roadway, one at a distance of not less than 100 feet in advance of such vehicle, one at a distance of not less than 100 feet to the rear of such vehicle, and the third upon the traffic side of the vehicle.
  - b. If accident occurs at time lighted lamps are not required a 16 inch red flag shall be used in lieu of the red reflector flares but at the same locations.
- 6. Examining passengers and applying first aid to the injured.
- 7. Sending for help. A list of persons to be contacted when emergencies arise, with telephone number of each, should always be posted in the bus or carried in the glove compartment. This list should include school officials, law enforcement agencies, and ambulance service company or hospital. Two of the older students should be selected to secure help and to notify proper authorities as one person may forget an important detail. Care must be taken to give the exact location of the accident and the possible extent of the injuries.
- 8. Collecting information pertinent to the accident.
- 9. Making an accurate and complete report of the accident.

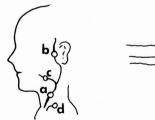
- B. If it is necessary to use the fire extinguisher, the following procedures should be observed:
  - 1. Direct nozzle at base of flame.
  - 2. Fight fire closest to gas tank first, but move away if flames are around tank.
  - 3. Keep your back to the wind.
  - 4. If fire is in engine compartment, raise hood if possible, or direct spray through louvers.
  - 5. After the fire is out, let the bus air thoroughly and make certain the vehicle is safe before moving it.

#### C. First Aid

- 1. All school bus drivers should take the American Red Cross Standard First Aid Course. The primary objective of first aid is to save life by:
  - a. Preventing heavy loss of blood.
  - b. Maintaining breathing.
  - c. Preventing shock.
  - d. Preventing further injury.

## 2. Control of Bleeding

If blood pours from a wound in spurts, it usually flows from an artery. Bleeding from veins is recognized by a steady flow. In controlling the bleeding from a cut artery, pressure must be applied between the cut and the heart. The six chief points where main arteries lie close to the bone are:





- a. In the neck just to the side of the windpipe, against the backbone.
- b. In front of the ear against the skull.
- c. About an inch forward from the angle of the jaw.
- d. Behind the inner end of the collar bone against the first rib.
- e. On the inside of the upper arm, halfway between shoulder and elbow.
- f. In the groin as it passes over the pelvic bone. (i.e., where the leg joins the body)

In either type of bleeding, place a thick compress (pad) on the cut and hold or bandage snugly in place. If bleeding is from a limb, elevate it. A tourniquet should be used **only as a last resort**.

3. Mouth-to-mouth (or mouth-to-nose) Method of Artificial Respiration

Before administering this method of artificial respiration, any foreign matter visible in the mouth should be wiped out quickly with the fingers or with a cloth wrapped around the fingers. The following steps should then be taken.

- a. Tilt the head back so the chin is pointing upward. Pull or push the jaw into a jutting-out position.
- b. Open your mouth wide and place it over the victim's mouth. At the same time pinch the victim's nostrils shut or close the victim's mouth and place your mouth over the nose. Then blow into the victim's mouth or nose.
- c. Remove your mouth, turn your head to the side, and listen for the return rush of air that indicates air exchange. Repeat the blowing effort. (For an adult, blow vigorously at the rate of about 12 breaths per minute. For a child take shallow breaths at the rate of about 20 per minute).

#### 4. Shock

Shock generally occurs with severe burns, wounds that bleed, broken bones and any other injuries of magnitude. The severity of shock may vary from a moment's weakness to death. Shock will follow any injury in some degree. The most common symptoms of shock are:

- a. Skin cold and clammy.
- b. Face pale.
- c. Pulse weak and rapid.
- d. Cold perspiration profuse on forehead and hands.
- e. Breathing is shallow and sighing is frequent.

## To prevent or overcome shock:

- a. Correct cause of shock if possible. (For example, control bleeding).
- b. Keep victim lying down.
- c. Keep his airway open. If he vomits, turn his head to the side so that his neck is arched.
- d. Elevate victim's legs, if there are no broken bones. Keep his head lower than trunk of the body if possible.
- e. Keep victim warm if weather is cold or damp.
- f. Keep victim as quiet as possible.

#### 5. Treatment for Fainting

- a. Have patient lie down with head low. Keep him lying down until he has completely recovered.
- b. Loosen any tight clothing.
- c. To ward off a fainting spell, have the patient sit with his head hanging low between his knees, and exert a slight pressure on his neck.

## 6. Some Important Don'ts

- a. Do not move injured persons unless necessary to prevent further injury.
- b. If the injured person must be moved, determine first, if possible, the nature and extent of the injuries.
- c. Do not transport an injured person in a passing car to a hospital. Wait for an ambulance or a doctor.

#### XII. EMERGENCY PROCEDURES

#### A. Emergency Drills

Due to the increased number of pupils being transported in present-day traffic with a potential increase in accident hazards, there is a need to instruct pupils to vacate a school bus in case of an emergency. Since the bus driver is responsible for the safety of the pupils, he must direct the emergency drills.

Important factors pertaining to school bus evacuation drills are:

- 1. Safety of children is most important and must be considered first. There is possible danger when a child jumps from the rear emergency door exit.
- 2. All drills should be supervised by the principal or by persons assigned by him to act in a supervisory capacity.

- Drills should be held on school property and not on bus routes.
- 4. "Emergency drills" should be organized in a manner similar to fire drills held regularly in schools.
- 5. Emergency drills should be held regularly, at least twice a year or perhaps more often during fall and spring months, and preferably when the bus arrives at the school building.
- 6. There are several different drills:
  - a. Everyone exits through the rear emergency door.
  - b. Everyone exits through the front entrance door.
  - c. The front half exits through the front door and rear half exits through the emergency door.
- 7. The driver should stay in the bus during evacuation drills. He should be sure that the emergency brake is set, ignition off, and transmission in gear.
- 8. Do not permit children to take lunch boxes, books, etc. with them when they leave the bus.
- 9. The pupils should go to a distance of at least 100 feet from the bus in an emergency drill and remain there in a group until given further directions by the leader.
- 10. All children should be given an opportunity to participate, including those children who only ride a bus on special trips.
- B. Regardless of the efficiency of the maintenance program, malfunctions are apt to occur. The driver must be prepared to react calmly and there are specific procedures he should follow when these happen.

#### 1. Flooded Engine

- a. Press gas pedal to floor and hold.
- b. Do not pump gas pedal.

- c. Run starter continuously.
- d. Release pedal when engine starts.

## 2. Jammed Accelerator

- a. Slap pedal hard with foot.
- b. Shift to neutral and turn off ignition.
- c. Use brakes.
- d. Concentrate on steering.

#### 3. Brake Failure

- a. Turn off ignition.
- b. Use parking brake.
- c. Shift to lower gear.
- d. Rub tires on curb.
- e. Look for safe area in which to maneuver the bus.

#### 4. Wet Brakes

- a. Test brakes lightly after driving through deep water.
- b. Brakes may pull to one side or may not hold at all.
- c. Dry brakes by driving slowly in gear and applying brakes.
- C. Other situations may occur when specific procedures are necessary.
  - 1. If a tire blows out, the driver should:
    - a. Concentrate on steering.
    - b. Slow down gradually.
    - c. Brake softly.
    - d. Pull completely off pavement or to extreme right of roadway.

- 2. If a car approaches in his lane, the driver should:
  - a. Sound horn.
  - b. Brake sharply.
  - c. Steer for right shoulder or ditch.

## 3. If right wheel drops off pavement, the driver should:

- a. Stop feeding gas.
- b. Maintain firm grip on steering wheel.
- c. Brake lightly and intermittently.
- d. Maintain bus control.
- e. Not attempt to return to pavement until there are no vehicles in the immediate vicinity.
- f. Turn back sharply onto pavement at a slow speed.

## 4. If bus is disabled, the driver should:

- a. Park with all four wheels off the travelled portion of the highway, if possible.
- b. Turn on parking lights or 4-way flashers.
- e. Set out flags and flares (fusees, if it is dark).
- d. Raise hood or tie handkerchief on a visible part of the bus to warn other motorists if he cannot immediately move bus off roadway.

#### D. Tornadoes

## 1. Precautionary Measures

During the fall and spring months, the bus driver should be alert to possible tornadoes during threatening weather. Before leaving on his route, he should check with the superintendent or other authorized local school officials on weather conditions. This would be a must if the area were under a "Tornado Watch." If it is clearly evident that the route can be completed before the weather closes in, the driver may proceed to pick up or unload the students. If a "Tornado Warning" is in effect, buses should not be loaded, and students should remain in the assigned shelter areas inside the school building.

- 2. If a tornado is sighted when on the route, the driver has several alternatives.
  - a. When the tornado funnel is clearly visible and when it is possible, drive at right angles to the path of the tornado.
  - b. Unload the students in a ravine, grader ditch, or other depression, some distance from the bus and in a direction that the wind will not roll the bus onto the students. A book or magazine should be used by each student as a shield to protect his face and head.
  - c. The driver should be aware of existing shelters on his route, such as caves, basements, concrete bridges, and other substantial structures that could be used as a tornado shelter.
  - d. Radios or other communication equipment should be in operation to receive messages relating to all emergencies. If no other equipment is available, a portable transistor radio will provide information from the local Emergency Broadcasting Station.

#### E. Blizzards

School bus drivers are faced many times with emergency situations during the winter months. Even with the most modern equipment and improved roads, winter weather can cause the most experienced driver much concern.

## 1. Precautionary Measures

 Drivers should acquire knowledge of existing and possible weather conditions.

- b. Drivers should acquire knowledge of weather bureau terminology.
- c. If possible, start trip with a full tank of gas.
- d. Check exhaust system for leaks.
- e. If possible, notify parents when students will arrive home early.
- f. Arrange for parents to call the next parents on the route and inform them of bus location.
- g. Do not change routes without notifying bus driver's supervisor or superintendent.
- h. NO ONE should be allowed to leave the bus at any time, including the driver, except at regular stops and when the destination of the student is visible.
- i. Emergency items to be carried during severe weather should include, but not limited to:
  - (1) shovel
  - (2) large box of facial tissue
  - (3) plastic scraper
  - (4) towels-paper or cloth
  - (5) "blizzard buckets"—2 or more one-gallon cans with plastic covers (empty three-pound coffee cans) to be used for toilet facilities. These buckets can be used to store candy or other non-perishable food items which would be most welcome on a bus marooned for a period of time.
  - (6) two or three blankets to use as partitions for temporary "rest rooms" on the bus.
  - (7) box of old newspapers.
  - (8) other items which might be considered:
    - (a) Catalytic heater to supplement or replace engine heat.
    - (b) Booster cables.
    - (c) Tow chain or cable.

#### 2. Emergency Procedures

- a. If bus is stalled, check for exhaust fumes if the engine is running. It may be necessary to open windows slightly for fresh air.
- b. The driver should remain calm and let the searchers find him. If precautionary measure "E-1-f" is followed, the marooned time can be greatly reduced.
- c. Driver and students should stay in the bus and keep dry.
- d. If there is no heat in the bus, have students clap hands, do isometric exercises, or other activities to stimulate circulation.
- e. Keep flashing lights going if at all possible.
- f. Driver-don't overexert and be a dead hero.

#### F. Floods

Precautionary measures and procedures

- 1. Never drive through water when unsure of the roadbed or hidden depressions or objects.
- 2. After a flood, unless the road has been traveled, bridge approaches and bridges should be checked before crossing.
- 3. Don't allow students to walk through water if the depth is unknown.
- 4. Check brakes periodically if driving through deep water which might get into the brakes.

## G. Agri-Chemical - Precautionary Measures and Procedures

The driver should be alert to locations where agri-chemicals are being used along the route—and watch for potential hazards.

- Portable tanks may release fumes (that are not visible) when in an accident.
- 2. Bulk stations may also be a source of deadly fumes.
- 3. Be aware of aerial spraying. Insecticides can be harmful to humans, as well as insects.
- 4. If any of the above conditions are encountered, all windows and vents on the bus should be closed.

#### XIII. SCHOOL BUS SAFETY PATROLS

The organization and use of a School Bus Patrol is recommended to assist the bus driver in the safe operation of the vehicle. When selecting members for the patrol, personality, strength, maturity and physical size should be taken into consideration. Alternates should be appointed to serve at times when regular members are not available. Other considerations are:

- 1. Written consent from the parents should be obtained before assigning pupil as a member.
- 2. There should be two regular members of the patrol for each bus one in the rear near the emergency door and the other near the driver.
- 3. Each patrol member should receive instruction on how to:
  - a. Turn off ignition switch.
  - b. Apply parking brake.
  - c. Use fire axe to knock out windows.
  - d. Use fire extinguisher.
  - e. Open and close service door and emergency exit.
  - f. Set flags, flares and fusees.
  - g. Administer simple first aid.
  - h. Help small children off bus.
  - i. Turn on lights.
  - j. Summon help when and where needed.
  - Steer the bus to safe place if driver is injured or sick.

- 4. No school bus patrol member should act without the direction or consent of the driver **UNLESS** the driver is physically unable to give instructions.
- 5. The duties of the School Bus Safety Patrol include but are not limited to:
  - a. Supervising the loading and unloading of the pupils in an orderly and safe manner.
  - b. Seeing that all pupils are properly seated.
  - c. Preventing pupils from getting off the bus when it is in motion.
  - d. Preventing pupils from moving around while the bus is in motion.
  - e. Assisting the driver in checking attendance.
  - f. Keeping the aisle free of books, instruments, etc.
  - g. Preventing pupils from tampering with emergency door or windows.
  - h. Preventing pupils from putting their hands, arms, heads or bodies out of the window.
  - i. Following the directions of the driver and assisting him in case of an accident or other emergency.

#### XIV. SCHOOL BUS DRIVER LIABILITY FOR PUPIL INJURIES

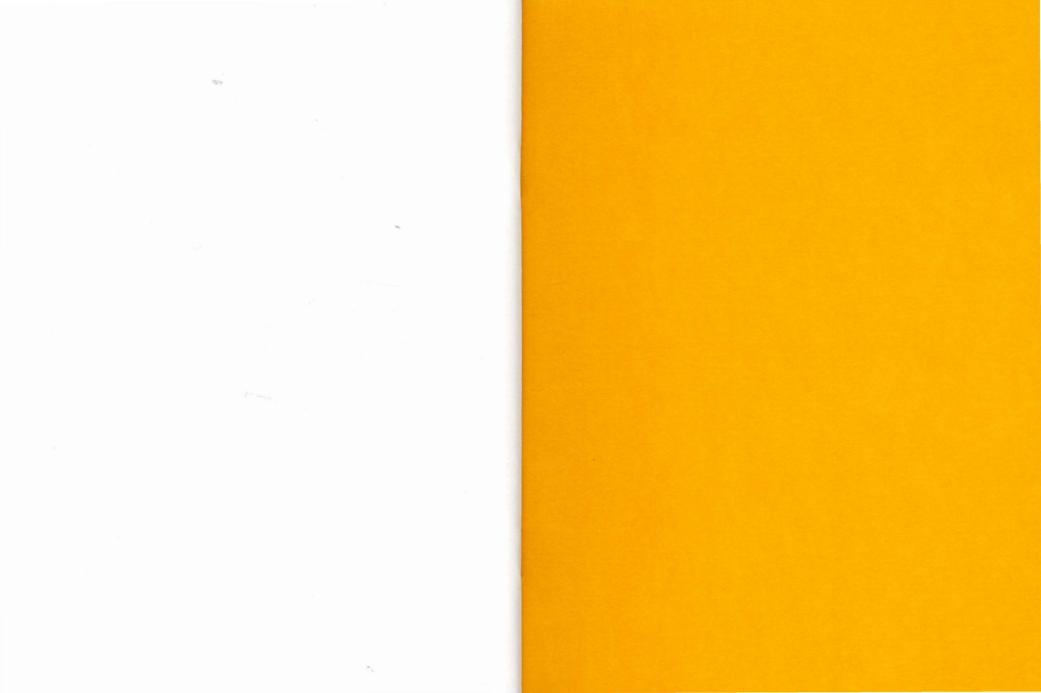
#### A. General

The driver of a school bus may be held liable for injuries to school children resulting from his negligence. All essential elements or grounds for negligence must be present. Courts generally consider these to be:

- 1. A legal duty to conform to a standard of conduct for the protection of others against unreasonable risks.
- 2. A failure to conform to the standard.
- 3. A reasonably close causal connection between the conduct and resulting injury.
- Actual loss or damage resulting to the interests of another.

## B. Considerations Used in Determining Driver Negligence

- 1. The degree of care ranges from "ordinary" and "reasonable" to "extraordinary" and "highest degree". The tendency of the courts is to require more care with younger children.
- 2. The approximate age of a child considered to be capable of recognizing traffic dangers is 10 to 11 years.
- 3. A district and the driver are both accountable for maintaining a safe vehicle.
- 4. Most cases involving boarding and alighting from a bus type of accident use the factors of "reasonable care" and "safe places" in determining negligence.
- 5. A driver is expected to keep order on a bus and may use any normally accepted means.
- 6. A driver is not automatically guilty of negligence if injury occurs. He has the opportunity to refute the charge by proof that proper care was used.
- 7. A driver may generally be held accountable for his acts separately from any decision regarding district liability.
- 8. NEGLIGENCE IS FOR JURY DETERMINATION.



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