

# EMERGENCY RESPONSE

Emergency Vehicle Operator Course  
Module 7





# MARYLAND CODE – TRANSPORTATION

## § 21-405 & § 21-510 – YIELD TO EMERGENCY VEHICLES

On the immediate approach of an emergency vehicle using **audible and visual signals**:

- Drivers and pedestrians shall *yield the right-of-way*.
- Drivers shall drive immediately to *a position parallel to and as close as possible to the edge or curb of the roadway*, clear of any intersection.
- Drivers shall stop and stay in this position until the emergency vehicle has passed.



# MARYLAND CODE – TRANSPORTATION

## § 21-106 - EMERGENCY RESPONSE

- Privileges are granted when:
  - Responding to an emergency call;
  - Responding to, but not while returning from, a fire alarm

Note the use of the word “privilege” and not “right”.

Emergency vehicles are requesting the right of way when using warning devices.



# MARYLAND CODE – TRANSPORTATION

## § 21-106 - EMERGENCY RESPONSE

- Privileges granted to fire department drivers are:
  - (1) Park or stand without regard to the other provisions of this title;
  - (2) Pass a red or stop signal, a stop sign, or a yield sign, ***but only after slowing down as necessary for safety***;

**DUE REGARD**



# MARYLAND CODE – TRANSPORTATION

## § 21-106 - EMERGENCY RESPONSE

- Privileges granted to fire department drivers are:
  - (3) Exceed any maximum speed limit, but only ***so long as the driver does not endanger life or property;***
  - (4) Disregard any traffic control device or regulation governing direction of movement or turning in a specified direction (no left turn, no u-turn, etc.)

**DUE REGARD**

# MARYLAND CODE – TRANSPORTATION

## § 21-706 - PASSING SCHOOL VEHICLE



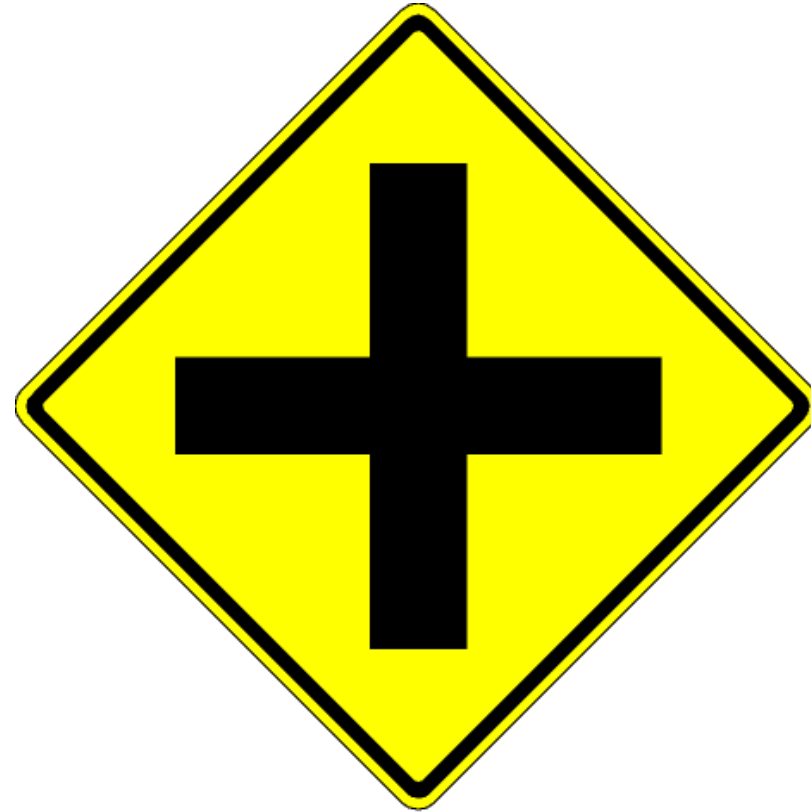
(a) If a school vehicle has stopped on a roadway and is operating the alternately flashing red lights, the driver of *any other vehicle* meeting or overtaking the school vehicle shall stop at least 20 feet from the front or rear of the school vehicle.

(b) If a school vehicle has stopped on a roadway and is operating the alternately flashing red lights, the driver of any other vehicle meeting or overtaking the school vehicle may not proceed until the school vehicle resumes motion or the alternately flashing red lights are deactivated.

(c) Exceptions. -- This section does not apply to the driver of a vehicle on a divided highway, if the school vehicle is on a different roadway.

# INTERSECTION BEHAVIORS

- Approaching
- Entering
- Jumping
- Other units



*Most likely location for an apparatus crash.*

# INTERSECTIONS

## APPROACHING

- One of the best proactive driving tactics is to reduce speed
- Adjust your speed to the available space cushion
  - Intersections are fixed object that as you close the gap you need to also reduce the stopping distance
- Reducing your speed gives other vehicles time to react to your approach
  - Let the play develop
- Change your siren cadence





# INTERSECTIONS

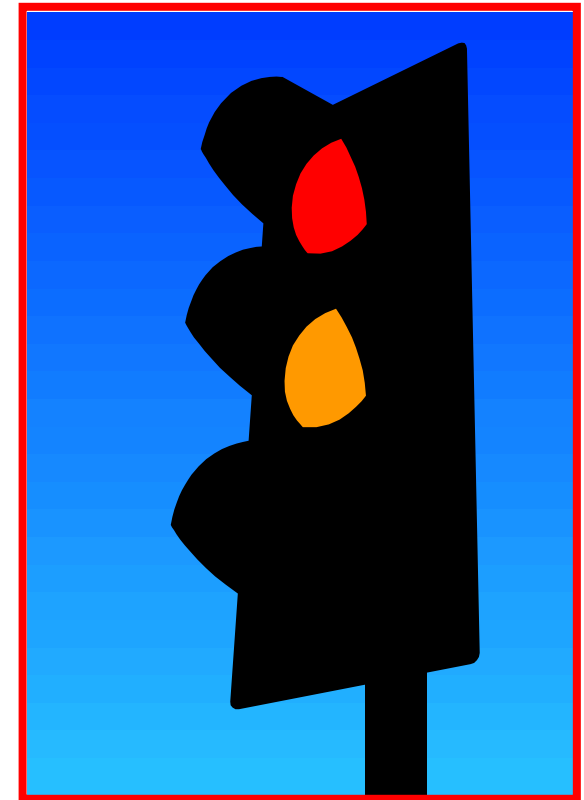
## APPROACHING

- Search ahead and identify potential hazards
  - Other vehicles
  - Pedestrians
  - Bicycles
  - Blind spots – buses, trees, buildings
  - Status of control devices – traffic lights, pedestrian crossing signals
- Identify the path of least resistance
  - Lane patterns
  - Avoid opposing traffic
- Cover the brake



# TRAFFIC CONTROL DEVICES

- Stale green
- Stale yellow
- Flashing yellow means proceed with caution
- Flashing red means stop before proceeding
- Yield sign
- Stop sign
- Four-way stops



# INTERSECTIONS

## SEARCH & IDENTIFY



#1



#2





# INTERSECTIONS

## SEARCH & IDENTIFY



#1



#2





# INTERSECTIONS

## SEARCH & IDENTIFY



#1



#2





# INTERSECTIONS ENTERING

- Entry occurs as soon as your front bumper crosses into cross-traffic
- If you cannot positively identify that right-of-way has been yielded to you, you must stop
  - Must do this for each individual lane
- Make eye contact with other drivers
  - Are other cars “acting” like they see you?
- Even when entering with the green light remain vigilant of other vehicles entering the intersection
- Avoid using the apparatus as a moving roadblock – this is aggressive driving



# INTERSECTIONS

## THE OPEN LANE

- Be especially wary of lanes that are not blocked by vehicles that have yielded to you.
  - Open lanes are an invitation to accelerate through the intersection to bypass the stopped vehicles
  - Open lane enables traffic to approach at higher rates of speed
  - Traffic that is already stopped obscures visibility to the oncoming vehicle or the oncoming vehicle's view of you
  - People see a green light and want to GO.



# INTERSECTIONS

## THE OPEN LANE

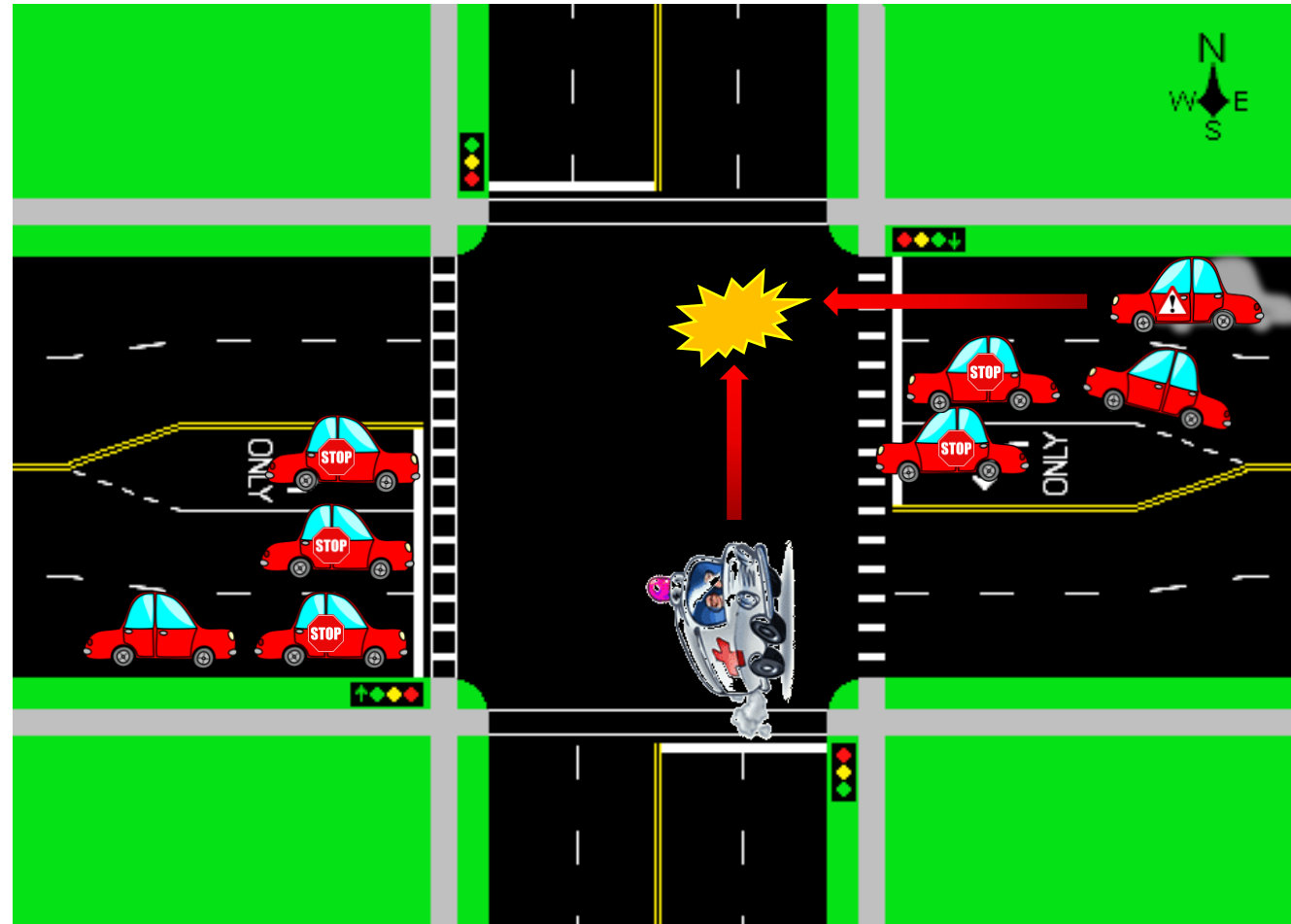
- Account for all lanes, including turn lanes, before fully committing to an intersection.
- Recognize that civilian drivers may not always do the right thing, such as
  - using a turn lane to circumvent stopped cars,
  - running a yellow or red light, or
  - simply electing to not yield the right-of-way to you.



# INTERSECTIONS

## THE OPEN LANE

Each lane is a separate intersection and must be controlled or clear before you cross!



# INTERSECTIONS JUMPING



- Operator depresses the accelerator hard from stopped position
- Vehicle jerks or jumps forward
- Hard on the apparatus
- Jumps before other vehicle moves forward is a common low speed, at-fault collision
- Smooth starts allow for decision space

# INTERSECTIONS

## OTHER UNITS



- Zone of confusion - Created by two or more emergency vehicles responding together
  - Civilian driver sees one emergency vehicle, but hears a different one at the same time
  - Civilian driver thinks the coast is clear but pulls into your path
  - Elderly and teenagers are especially susceptible
- High-risk situation
- Anticipate other vehicles to make mistakes during the confusion



# INTERSECTIONS OTHER UNITS



*Click photo for YouTube video*



# INTERSECTIONS OTHER UNITS



It happened here.

Engine 23 struck Ambulance 21 as they both entered an intersection enroute to a Hazmat Box.





# PROCESSION RESPONSE

- Travel single file with largest vehicle leading to create a path
- Maintain space cushions
  - Expect the leading unit to stop
- Each vehicle must use the normal precautions
  - Proceed as though no other units already entered
- Use contrasting siren tones
  - electronic siren with alternating or pulsing tone.



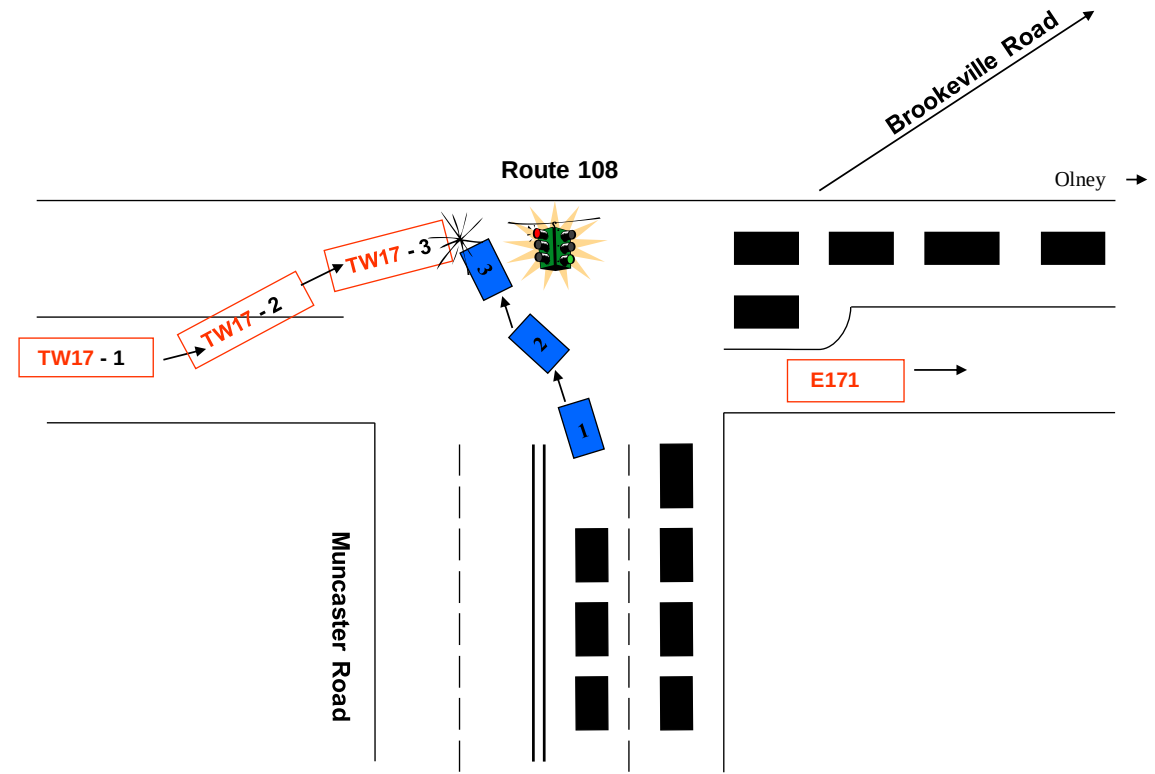
Passing other emergency vehicles must be a coordinated action.

# TANKER 17 – FATAL COLLISION

## JUNE 22, 2000



- Multiple responding units
- Zone of confusion
- Evasive maneuver

























# PASSING OTHER VEHICLES

- Be very cautious about passing civilian vehicles who have not completely yielded to you
  - Watch for “body language” that indicates recognition of your presence
  - Vehicle may be slowing down to make a turn
- Passing to the right of moving vehicles should be avoided
  - Places you in a position with no escape should the driver suddenly yield
- Avoid the temptation to close the gap between you and other vehicles
  - Eliminates your decision space
  - Reduces other driver’s visibility to your warning lights





# OPPOSING TRAFFIC

- Increased gridlock and lack of shoulders encourages use of the opposing lanes of traffic.
- This option should not be chosen lightly and requires the highest degree of caution.
- Other vehicles are never expecting approaching emergency vehicles, but definitely not oncoming in their lane.
- Unpredictable civilian drivers become even more unpredictable
- Forward-facing warning lights are generally the most intense and blinding



# OPPOSING TRAFFIC

- How many drivers look for traffic coming from their right when turning right? Expect traffic that is coming from intersections to your left not to see you until they have turned into your lane. Their focus is to their left checking for traffic.
- Which lane are you going to choose? Is it best to be in the far left lane, middle lane, or right lane of opposing traffic?
- Cutting your closing rate in half if the cars coming at you are doing the same speed as you.
- What is your plan to return to the normal flow of traffic before arriving on scene?

# OPPOSING TRAFFIC



What is the risk?  
What is the benefit?  
How far would you go?







# DISTRACTIONS

- Crew chatter and behavior
  - Exercise “communication” discipline while the apparatus is in motion
- Radio, cell phones, MDT
  - MDT and radio need to be left to the officer
  - Do you wear your radio strap while driving? What happens when it slips off your shoulder or limits your mobility? Stow it safely and don it when you arrive at the scene.
- Unusual, undisciplined, or emotion-charged radio traffic leads to distracted thoughts, emotions, or conversations in the cab of responding units.
- Hand-held cell phone use while driving medium or heavy apparatus is forbidden.
- Territory knowledge
  - Constant uncertainty about the next turn results in less situational awareness
- Mechanical malfunctions and alarms
- Unsecured items
  - The driver should not be catching sliding map books or water bottles

# DISTRACTIONS





# DISTRACTIONS

- Officer operates the siren, radio, and auxiliary functions of the truck – driver focuses on driving
- Officer assists with routing
- Officer manages the MDT
- Officer assists with spotting for the driver
  - Intersections
  - Backing
  - Addresses and street signs
- Crew keeps chatter in the headsets to a minimum during responses





# ARRIVING ON SCENE

## STRUCTURE FIRES

- EMS transport units are NOT primary units
  - Engines, aerials, rescue squads
- Hold your radio traffic to allow primary units to have air time
  - No initial on-scene report is required by EMS units
- Park for egress to allow patient transport
- Gather equipment and recon the scene
  - Conduct a 360° survey
  - Focus on life safety hazard/occupant status
  - Identify hazards to initial operations, i.e. downed wires, animals, hoarding conditions

# SUMMARY



- Emergency response takes a dynamic situation and exponentially increases the hazards
- Emergency response does not always mean extra velocity
- Emergency response is a time for discipline and control; not wide-eyed aggression
- Do not recklessly endanger multiple lives to save one