

Towing 101: Trials & Tribulations

Robert W. Bressler
President

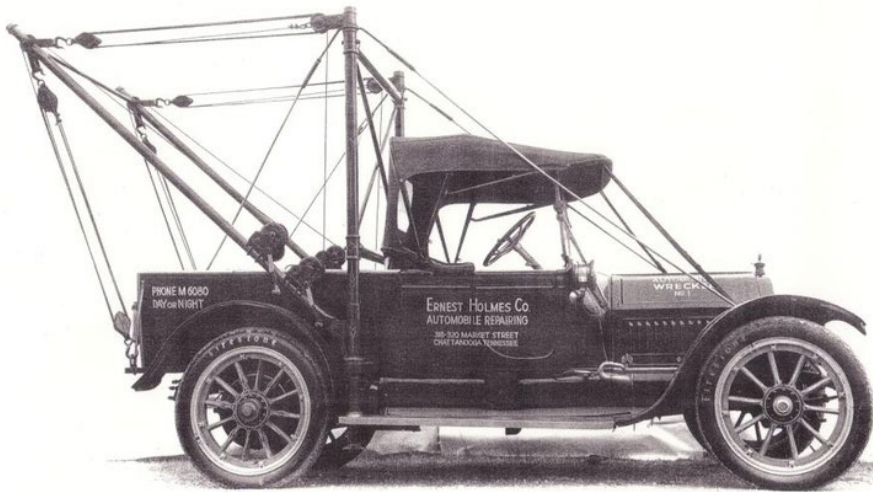
Bressler's Garage Inc.
Bressler's Environmental Service

Transportation Engineering and Safety Conference
December 6, 2023



Ernest Holmes and the Birth of an Industry

- 1913 Cadillac chassis
- Holmes 485 body (patented 1917)
 - Split boom & pulley system – 4 ton rating
 - Wire & hook to attach to bumper
 - Outrigger legs
 - Hand-operated



Replica of first tow truck with Holmes 680 body

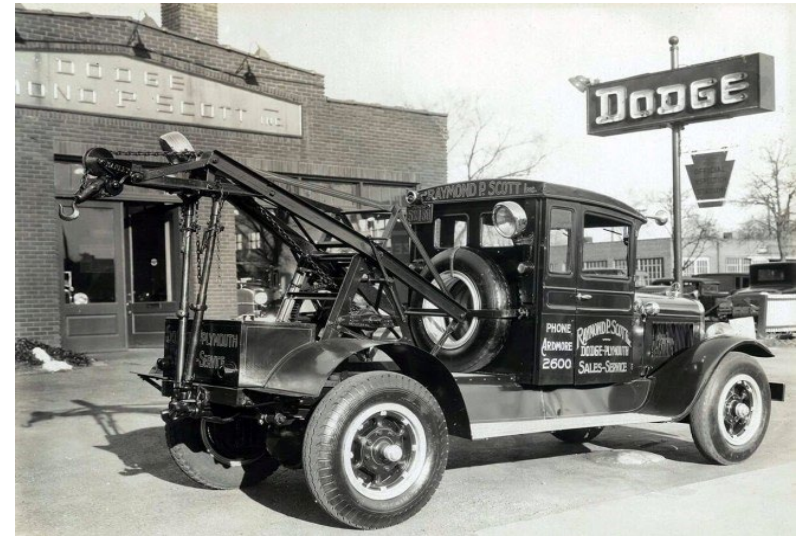


1920s-1950s: Refining Design

1926 Ford Model T



1935 Dodge-Plymouth



1946 Chevy



1950s Buick



WWII and Heavy-Duty Towing



- Diamond T 969A
 - 4 ton 6x6 chassis
 - 6 cylinder gas engine
 - 5 speed manual transmission
 - Transfer case with high and low range
 - “Pumpkin” type axles
- Holmes Twin-Boom Wrecker Body
 - Booms rotate 90° forward to side
 - Outrigger
 - 2 winches – independent operation
- 6420 built 1940-1945



Wars and Rotators

Series 1



1952 International M62 – 5 ton



Series 2



- 1941 Ward LaFrance M1A1
 - 6 ton or 10 ton
- Gar Wood Industries Body
 - Single boom with hand wheels
 - 180° traverse
 - Outriggers
 - Boom jacks
 - Rear drag winch

1960s-1990s: Innovation Age

- 1965 – 67% of wreckers are Holmes designs
- 1975 – NRC patents hydraulic underlift
- 1981 – Bill Jackson debuts 1st commercial rotator at FL Tow Show
- 1990 – Miller Industries acquires Holmes and Century
- 1992 – NRC produces first sliding rotator



Rotator History: <https://www.tapatalk.com/groups/tow411/who-invented-the-rotator-t75976.html>

NRC History: <https://nrc-industries.com/nrc-history/>

2000s-Present: Rotator Domination



1940s-2020s: Evolution of Truck Tractors



Rainier Press Photo: <https://www.autopaper.com/1940s-1950s-rainier-beer-tractor-trailer-press-photo-0001.php>

Tesla Semi: https://en.wikipedia.org/wiki/Tesla_Semi

Title 75 - PA Vehicle Code

- Chapter 37: Miscellaneous Provisions
 - 3743.1 Spilled Cargo
 - 3745.1 Accident Scene Clearance
 - 3757 Compensation for Incident Removal Costs
 - Any entity that removed a vehicle or cargo from an accident scene under law enforcement direction has the unqualified right to compensation for removal, cleanup, and storage costs from owner of removed vehicle, owner of vehicle from which cargo was removed, and removed cargo.
- Chapter 73: Abandoned Vehicles & Cargo

PA Towing & Towing Storage Facilities Act (2012 Act 110)

- Tow truck & towing storage facility operators shall:
 - Maintain physical address
 - Register tow trucks with PennDOT
 - Display name, address, & phone number on trucks
 - Post hours of operation & rates on premises
- May only remove vehicles from accident scene if summoned by law enforcement or vehicle owner
- Access to towed vehicles only granted during posted business hours
- Vehicles involved in accidents released to owner only upon payment of itemized written invoice

PA Emergency Towing Services (Heavy Duty)

PSP

- Minimum 2 tow trucks GVWR >50,000 lb
- 25 ton winching capability
- 25,000 lb wheel lift on 1 truck
- Minimum \$200,000 garage keeper's insurance
- Established place of business
 - Not subcontracted or substitute service
 - Secure storage lot
 - No answering service
- No principal charged with or convicted of misdemeanor

PennDOT

- Minimum 73,280 lb GVWR
- 50 ton capacity
- Wheel lift
- 3 stage hydraulic recovery boom
 - Boom can slide under load
- 1 hr response time, 24/7/365



Move Over Law (Title 75 § 3327)

- Emergency response area or disabled vehicles
 - Pass one lane over
 - Slow down 20 mph if cannot change lanes
- Penalties
 - Loss of license <1 yr for emergency responder death
 - <\$5000 fine for bodily injury
 - <\$10000 fine for death

Risks and Realities

- Tow truck driver deadliest job in US
 - Average of 60 tow truck drivers killed/year
 - Fatality risk ~15x greater than workers in all other private industries
 - Non-fatal injury risk 2-3x greater than in all other private industries
- 71% of Americans unaware of their state's Move Over laws
- CDC and NIOSH recommendations
 - Wireless controls for winches & beds
 - Portable emergency warning devices
 - Traffic Incident Management
 - Move to a safer location – pull-off or ramp

Risks and Realities

Initial multi-agency response



After driver extrication



Traffic Incident Management saves lives, but it is often unavailable in PA for towing service providers.

Risks and Realities



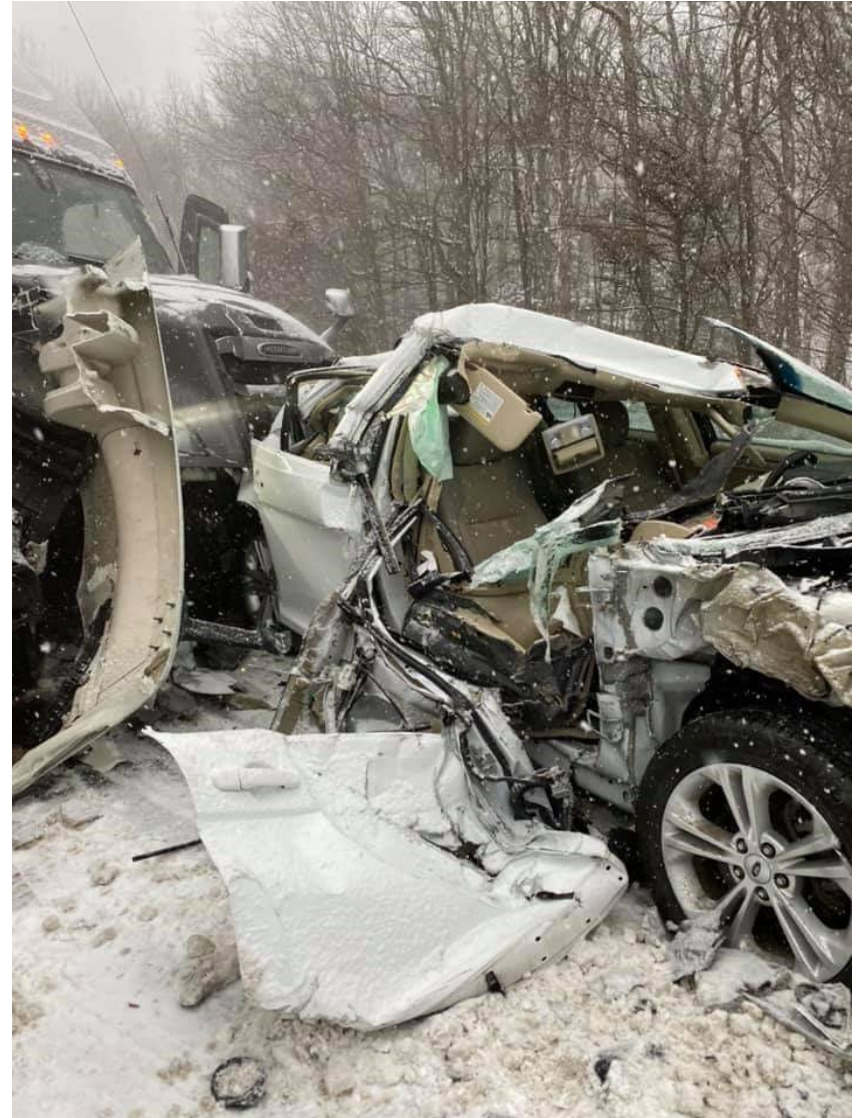
Are you available for a tow?
(December 18, 2019)



December 20, 2019 - 55 vehicles cleared



December 16, 2020 Pileup



Conclusions

1. Towing and accident recovery is a dangerous job.
2. PA towing legislation is woefully out of date.
3. Towing is not trucking, yet it is governed by the same regulations in PA.
4. Tow truck operators should be classed as emergency responders.

Thank You!

