

**LINE OF DUTY
DEATH REPORT
REPORT SLIDES**



F2021-21

Firefighter dies from head injury
during tire inflation – Louisiana



Summary

- On December 18, 2021, a 28-year-old career firefighter died from head injuries incurred when a tire bead came off the wheel rim with great force during vehicle maintenance operations.
- Firefighter 4 (deceased firefighter) was assigned to Station 4.
- He began his shift by performing apparatus checks.



Apparatus tire that came off the wheel rim while being refilled with air.
(Courtesy of the fire department)



Summary

- During a check of Engine 4, he checked and inflated the tires to ensure they were all above 95 psi.
- At 08:30 hours, firefighter 4 called the shift captain to notify him that he was bringing Engine 4 to Station 1 to check and inflate the tires.
- Upon arriving, he parked Engine 4 in front of bay 1.



Engine 4 with tire off the rim.
(Courtesy of the fire department)



Summary

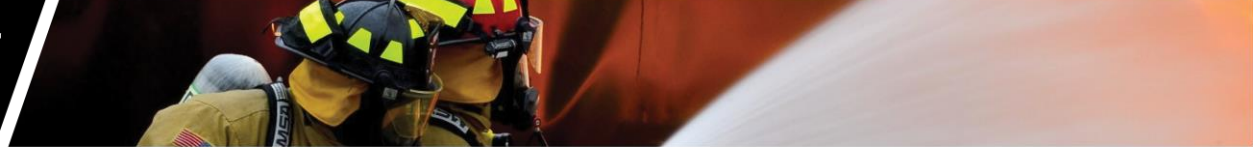
- Firefighter 4 connected a pre-connected 100 ft air line from the external fill port of the station's cascade system to the tires.
- The regulator for the cascade was set to around 100 psi.
- Firefighter 4 also secured a manual tire gauge and an air chuck.
- The air chuck was connected to the airline.
- The shift captain arrived to assist in checking and inflating the tires.



Summary

- The captain started inflating the front passenger side tire.
- Firefighter 4 then took over inflating the passenger side rear tires.
- During inflation, each tire was checked with the manual tire gauge to ensure each was above 95 psi.
- Upon checking the outer dual configuration tire on the driver's side rear, firefighter 4 noted that the pressure was only 50 psi.
- He began to inflate the tire by sitting on the ground directly in front of it and holding the air chuck onto the tire valve stem.

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Rim deformation passenger
side rear of Engine 4. (Courtesy
of the fire department)

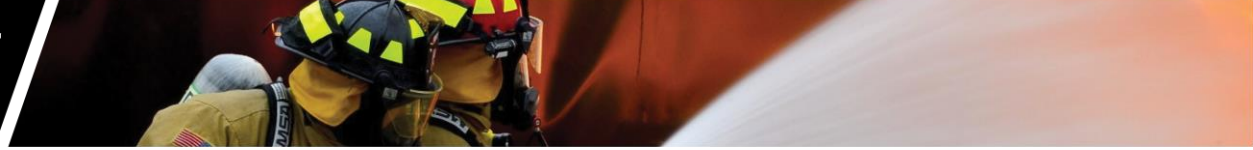


Simulator/hubcap from
passenger side of Engine 4.
(Courtesy of the fire department)



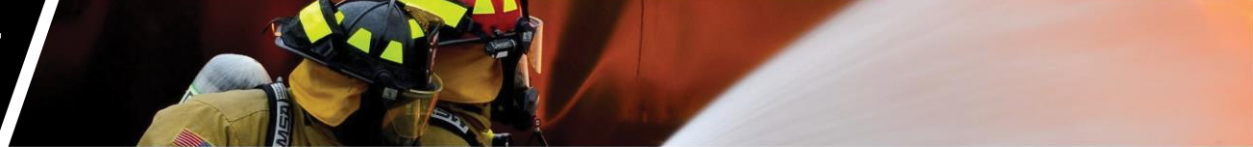
Summary

- After a short amount of time inflating, the tire bead came off the wheel rim with great force which launched the simulator/hubcap as a projectile hitting firefighter 4 in the forehead.
- Firefighter 4 was thrown back about 30 ft from Engine 4.
- Upon witnessing the incident, the shift captain promptly contacted the parish public safety answering point and requested a medic unit and a medical helicopter be dispatched to their location.
- The captain and another firefighter rendered medical aid to firefighter 4 who was unconscious and bleeding from the head.
- Firefighter 4 was transported to a local hospital and pronounced deceased.



Contributing Factors

- Procedure and equipment for inspecting and inflating apparatus tires
- Training on daily/weekly visual and operational checks of apparatus



Recommendations

- Ensure that firefighters have access to and use appropriate equipment and safe operating procedures to inspect and inflate apparatus tires.
- Ensure firefighters are trained on how to conduct daily/weekly visual and operational checks of apparatus.
- Add information about tire explosion hazards and provide hands-on training for safe inspection and inflation of apparatus tires in driver/operator and maintenance training programs and publications.

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