



NORTHWEST CONSTRUCTION CONSUMER COUNCIL

CASE STUDY



***PERSISTENCE YIELDS OUTSTANDING
SAFETY PERFORMANCE***



NORTHWEST CONSTRUCTION CONSUMER COUNCIL

TRAVIS MILLHOLLIN

EXECUTIVE DIRECTOR - NWCCC



Travis has 25 years of experience in leadership roles across operations, maintenance, health & safety, and business planning/optimization in the refining industry. In these roles, he developed a keen interest on how leadership factors can be in play to set the stage for accidents to occur, how human factors cause well-intentioned and capable people to make simple errors, and how organizations must learn and make the right changes following accidents. Travis graduated with a Chemical Engineering degree from Montana State University and with an MBA from Western Washington University.

DO YOU KNOW THIS PERSON?

RYAN NEWMAN

- 26 RACE WINS IN 21 YEARS
- MECHANICAL ENGINEER - PURDUE
- OPININATED, STUBBORN
- SURVIVOR



FEBRUARY 17, 2020



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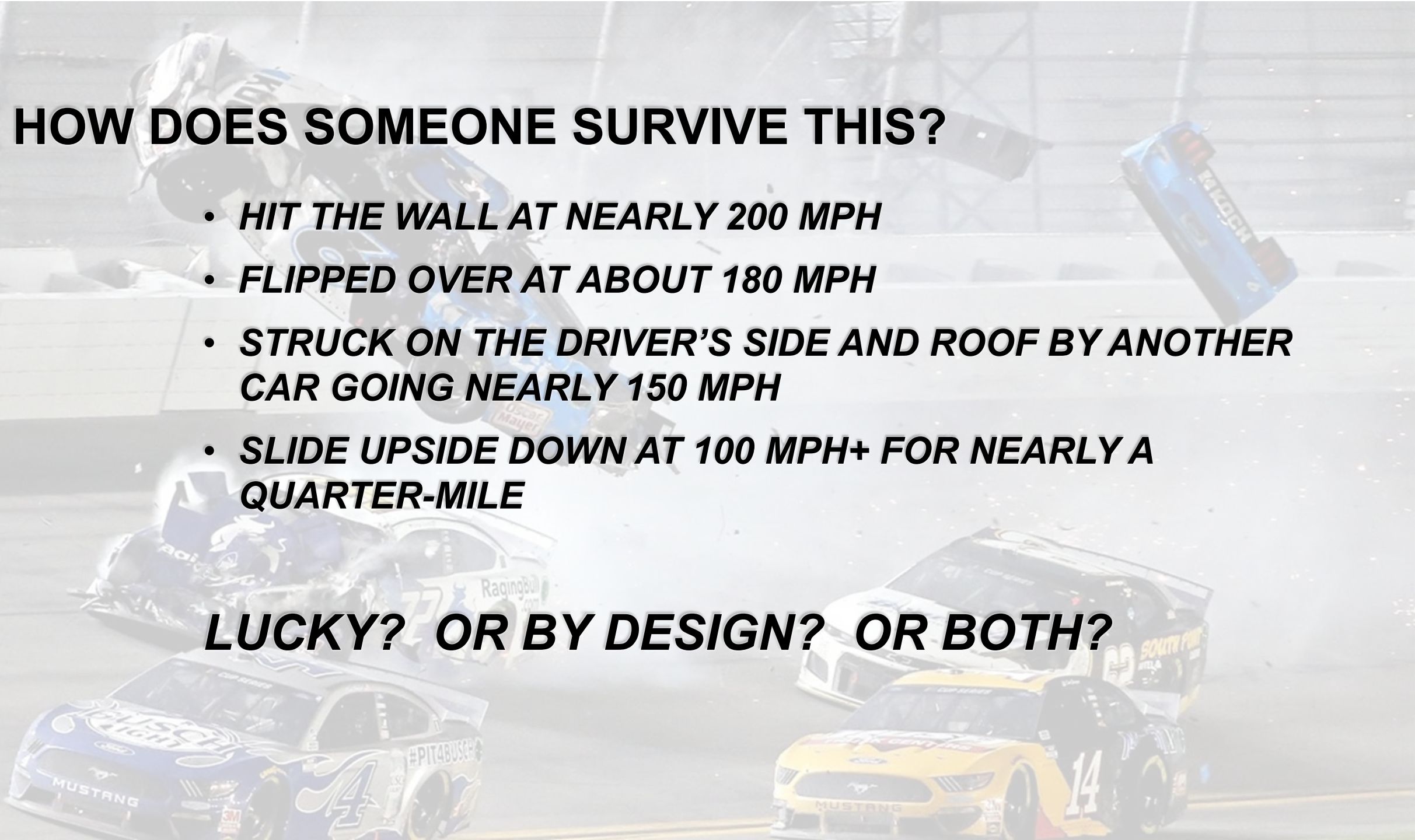
TWO DAYS LATER...



HOW DOES SOMEONE SURVIVE THIS?

- ***HIT THE WALL AT NEARLY 200 MPH***
- ***FLIPPED OVER AT ABOUT 180 MPH***
- ***STRUCK ON THE DRIVER'S SIDE AND ROOF BY ANOTHER CAR GOING NEARLY 150 MPH***
- ***SLIDE UPSIDE DOWN AT 100 MPH+ FOR NEARLY A QUARTER-MILE***

LUCKY? OR BY DESIGN? OR BOTH?



NASCAR HISTORY



**BILL FRANCE SR,
FOUNDER**

BEGAN IN FLORIDA IN 1948:

- **ORIGINALLY STREET VEHICLES THAT OWNERS/DRIVERS MODIFIED FOR RACING**
- **ROOTS IN BOOTLEGGERS DURING PROHIBITION THAT WOULD OUTRUN THE POLICE WITH THEIR SOUPED-UP CARS**
- **CONSISTS OF FOUR NATIONAL LEVELS, AS WELL AS REGIONAL US, INTERNATIONAL, AND EVEN ON-LINE RACING**

NASCAR'S MORE FAMOUS DRIVERS



RICHARD PETTY
7x CHAMPION
200 RACE WINS



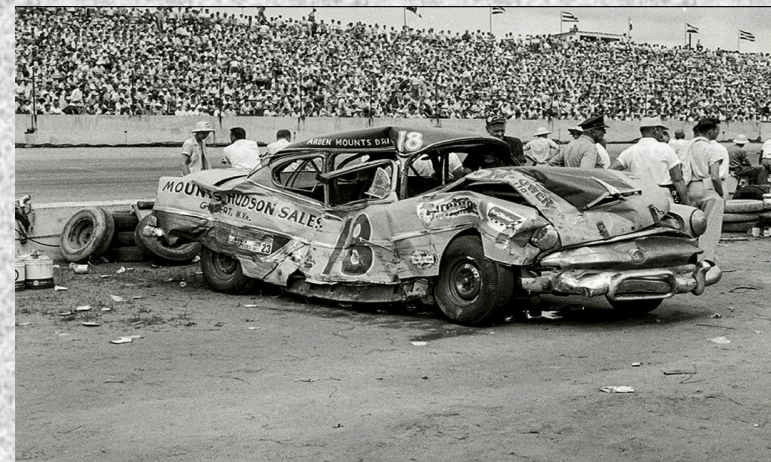
DALE EARNHARDT
7x CHAMPION
76 RACE WINS



JIMMIE JOHNSON
7x CHAMPION
84 RACE WINS

NASCAR HISTORY

FIRST 53 YEARS: 28 ON-TRACK DEATHS, COUNTLESS MAJOR INJURIES



NASCAR HISTORY

LAST 20 YEARS: ZERO ON-TRACK DEATHS, RARE MAJOR INJURIES

OVER 28 MILLION MILES DRIVEN...120 TIMES TO THE MOON!



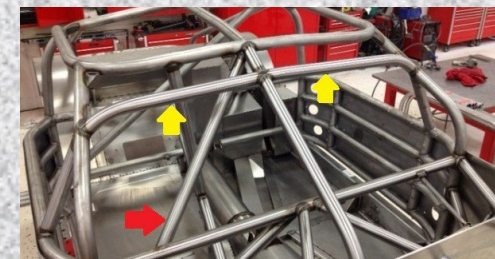
IT'S A LONG STEADY ROAD TO IMPROVE SAFETY

- **1964: WINDOW NET**
 - FLYING DEBRIS AND KEEP ARMS/SHOULDERS IN THE CAR
- **1965: FUEL CELLS**
 - PREVENT FUEL SPILLS AND FIRES IN ACCIDENTS
- **1988 RESTRICTOR PLATES**
 - RESTRICT TOP POSSIBLE SPEED OF CARS TO REDUCE FORCES AND DAMAGE IN A CRASH
- **1993 ROOF FLAPS**
 - KILL SPEED, REDUCE LIKELIHOOD OF GOING AIRBORNE



IT'S A LONG STEADY ROAD TO IMPROVE SAFETY

- **2001: HANS DEVICES**
 - HEAD AND NECK SUPPORT
- **2002: SAFER BARRIERS**
 - “STILL AND FOAM ENERGY REDUCTION” ON CONCRETE RACETRACK WALLS
- **2000's: SEAT, HELMET, AND RESTRAINT IMPROVEMENTS**
 - PROTECTING DRIVER FROM IMPACTS
- **2008 COMPLETELY RIGID DRIVER CAGES**
 - PREVENT COCKPIT INTRUSION



IT'S A LONG STEADY ROAD TO IMPROVE SAFETY

**SOMETIMES YOU BECOME A SAFETY
CHAMPION BECAUSE IT HAPPENED TO YOU....**

IT'S A LONG STEADY ROAD TO IMPROVE SAFETY

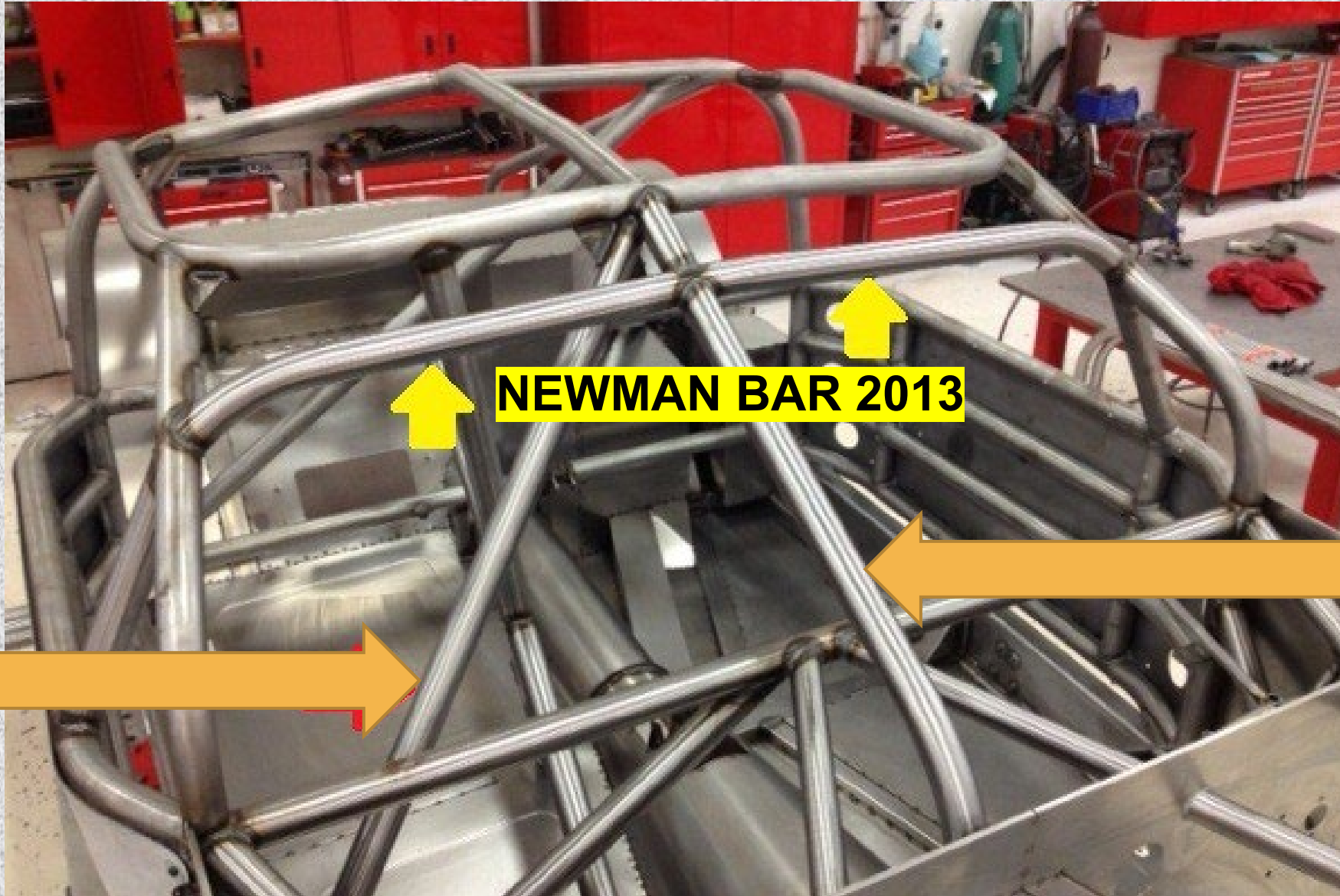
RYAN NEWMAN BECAME A VOCAL — OBVIOUSLY — PROPONENT OF THE INSTALLATION OF A NEW MANDATORY BAR ACROSS THE FRONT OF THE ROLL CAGE FOLLOWING THE 2009 AND 2013 CRASHES WHERE HE NEARLY SUFFERED TRAUMATIC INJURY FROM THE UPPER FRONT OF THE ROLL CAGE COLLAPSING INWARD.

IT'S A LONG STEADY ROAD TO IMPROVE SAFETY

WHAT BECAME KNOWN AS THE “NEWMAN BAR” WAS INSTALLED IN ALL CARS IN MID-2013.

IT JOINED TWO OTHER NAMED COMPONENTS OF THE ROLL CAGE: THE “PETTY BAR” (1970 WRECK) AND THE “EARNHARDT BAR” (1996 WRECK).

IT'S A LONG STEADY ROAD TO IMPROVE SAFETY



**PETTY
BAR
1970**

**EARNHARDT
BAR
1996**