

Shell Trailers and Their Regulation

By Mark Schofer

With the growth of the sport, more rowing teams are taking to the road than ever. But that often means that clubs are encountering highway regulations that seem arbitrary or confusing. Safe and legal trailering need not be a stressful issue, however, if drivers are aware of the rules that apply to all vehicles on the highways.

As a rigger for a college rowing program, I am frequently a sounding board for frustrated trailer drivers who are caught out by the demands of policemen, highway patrolmen, or tollbooth operators. Unsure of the regulations that cover their rigs, drivers sometimes buy special road permits without really knowing why, or are ticketed for offenses that they didn't know existed. Time and money are wasted in fighting toll issues, and, more often than not, fines are mailed in to magistrates without the payer even being aware of his rights on the road. Even more exasperating is the vague feeling that some drivers get from the police themselves, leading them to believe that the officials imposing on their time and wallet don't even know the regulations they are trying to enforce. Drivers often embark upon their trips with knowledge gleaned from inaccurate or incomplete sources, or based upon the advice of others in the sport, who may know little other than "we've always done it that way".

There are, however, routes and regulations that will help trailer drivers plan their trips and arrive at their destinations without having to deal with obtaining unnecessary permits or time-consuming detours. The advent of the Internet has allowed access to information that was, up to now, difficult to find. Using the Internet as a resource can allow trailer drivers to arrive at almost any destination legally and painlessly. Familiarity with regulations can even be helpful in educating public servants who, although they may be well trained in a number of areas, may simply not be up to speed themselves on the obscure rules which cover creatures as rare as a trailer full of racing shells.

The National Network of Highways

The debilitating trade environment that existed under the Articles of Confederation was one of the reasons that the Constitution was proposed and adopted by the original states of the union in the eighteenth century. With each state envisioning itself as free and

independent, it became ridiculously difficult for goods to be traded between the entities that made up the United States. The new Constitution addressed the issues of interstate commerce by putting regulation of it in the hands of the federal government. The country prospered when Congress used its authority to regulate canal and road traffic, and the government extended its authority to cover railroad and airline traffic as those industries became more influential. Naturally, with federal funds involved in highway projects, the same authority was been extended to cover the automobile and trucking industries. The Department of Transportation, through the Federal Highway Administration, has developed a system known as the National Network of Highways. Familiarity with this highway system and its equipment requirements is the secret trailer drivers need to know if they want trouble free access to the nation's roads.

The National Network of Highways is a system of routes that, if used by a driver while in compliance with federal regulations, will allow a trailer to travel just about anywhere in the country. The Network includes almost all of the Interstate Highway System, including toll roads that have been incorporated into the system, as well as a large number of federal highways that are not a part of the Interstate system. The Network also includes a number of state highways that are built to standards acceptable to the federal government and that have been added to the system with the cooperation of the state governments. Trailers that travel on the National Network are not obliged to apply for any special transport permits while on their trip, provided that the vehicle complies with all federal regulations covering them. Since Network highways aren't always near to a trailer driver's destination, the regulations allow enough leeway for drivers to travel some distances of Network without penalty. The regulations also allow drivers to leave the Network to seek services on a restricted basis.

To illustrate a typical trip; Lets assume for a moment that a driver needs to take his trailer full of shells from Ithaca, New York, to Boston, Massachusetts, to participate in the Head of the Charles Regatta. While Ithaca itself is not directly adjacent to an Interstate highway, it is home to enough businesses and industries that reasonable access is provided by state roads leading to it. Therefore, our driver has every right to drive his trailer from Ithaca to the nearest Interstate highway (in this case, 1-81) with little restriction by state authorities. The only thing he must do is 1) Ensure that he is traveling the most direct practicable route, 2) Utilize no roads that are specifically marked as off-limits to vehicles of his size and weight, 3) Take no route that is publicly marked with height or weight restrictions which would make

the route impassible for his vehicle, and 4) Take no route where public markings indicate that road construction prohibits transit by his vehicle.

Upon reaching Interstate 81, our intrepid driver has a choice of two routes to take. He can travel south and connect to I-88 East, or he can travel north to I-90 East.

Since both routes are part of the National Network, the driver can avail himself of either. Should our driver choose to travel I-90, he will be traveling on the New York Thruway, a toll road. Although revenue from tolls on the highway goes to Albany, the road itself is part of the Interstate system, and part of the National Network. As a result, federal regulations apply on the road. So long as our rig is in compliance with federal regulations our driver is under no obligation to obtain any special permits from the Thruway Authority.

Upon arriving in Boston our driver must find his way to Magazine Beach, where his team is waiting for him. So long as he leaves the Massachusetts Pike at the Cambridge exit (the nearest exit), he can travel on city roads directly to his destination. He must keep in mind the height restriction on the pedestrian bridge on Memorial Drive, but if he has taken that into account, he's in.

In this case our driver has availed himself of rules that allow him to travel directly from one terminal to the next. A terminal is the term used by the National Network to designate the origin and destination of a trip. In this case, the terminals are the boathouse in Ithaca and Magazine Beach. So long as our driver travels the most direct route to and from these terminals, so long as his vehicle is in compliance with federal regulations, and so long as he avoids routes where his rig is specifically prohibited, he is allowed to travel as he pleases.

But now he has to return home, so let us give him an opportunity to screw up.

If our driver forgets to go to the ATM for some ready cash, he may be tempted to travel through Newton to avoid the tolls on the Mass Pike. Since he is not going directly to the Network, he is on his own hook, and the Newton police would be within their rights to ticket him for violating any local dimension ordinances. If our driver travels south to visit the Vespoli factory, and then decides to avoid traffic by traveling on the Merritt Parkway, he would be traveling on a road, which specifically prohibits his use of it, both by highway signage and on

state maps. Should he manage to avoid trouble until he finds his way back to Interstate 88 west, he would further tempt fate when, if leaving the highway for food, he passed up the gaggle of fast food joints near an exit ramp to enjoy the cuisine at his favorite roadhouse five miles down the road - a trip from the network that is far from necessary for his needs.

On his return trip our driver has not traveled directly to the Network highway, has traveled a route that specifically excludes vehicles of his type, and has strayed unreasonably far from the Network in search of services. In such a case, our driver is not protected by the regulations covering the National Network, and is obliged to follow state or local regulations in his travels. At best, he may need permits for his wanderings; at worst, he'll get nicked by the law.

Knowing how to find the National Network is an easy task. At the end of this article there is an Internet address for the National Archives and Records Administration. This site houses the Code of Federal Regulations, and within this code are the regulations for the Federal Highway Administration, Department of Transportation. Within these regulations, highways that are a part of the National Network are listed, state-by-state. For those who find it easier to set routes graphically, the same information can be found by taking a trip to the nearest truck stop or bookstore. Several publishing companies produce road atlases, and trucker's versions of the popularly issued atlases highlight the National Network. Drivers can thus plan their trips based on information from either of these two sources.

Trailer dimensions

Although shell trailers constitute a minute proportion of the traffic on highways today, their existence has not escaped the eye of Uncle Sam, and their description and dimensions are spelled out in the Department of Transportation regulations. The description is remarkable in its completeness, lacking only the word "shell" within the definitions. Shell trailers are considered to be in a category called "special equipment", and are defined as "truck-trailer boat transporters". They are further defined as vehicles using a "straight truck" with a ball and socket hitch, and pulling a trailer with axles located near the center of gravity, as opposed to near the end of the trailer.

Further details allow as how the boats transported are routinely disassembled for transport. This definition clearly places shell trailers in a category distinct from other rigs that travel the highways.

The dimensions of shell trailers are likewise clearly defined, with but one notable grey area. Shell trailers are to be allowed unhindered access to the National Network if their total length, front bumper to rear bumper, is no greater than 65 feet.

The definitions are quite specific in noting that ancillary devices, such as mirrors, turn signal lamps, splashguards, and other such minor protrusions are not to be counted when measuring dimensions of vehicles, so a shell trailer driver need not worry that his license plate bracket will take him over the limit. Boat transporters are allowed a certain amount of overhang on their loads as well, this dimension being 3 feet at the front of the vehicle and 4 feet at the rear. The regulations further state that overhang dimensions are independent of the vehicle dimensions, so that a truck-trailer combination that was exploiting its fullest dimensions could be as long as 72 feet. In reality, front overhang is rarely an issue with boat transporters, but rear overhang is almost always a matter of concern.

The grey area involves the issue of light bars. Frequently offered as equipment on shell trailers, the light bar can offer a false sense of security. Federal regulations exclude turn signal lamps and non-property carrying devices from length and width determinations, so a light bar, while making a vehicle more visible, won't make it longer in the eyes of the Feds. This may prove to be an issue when a policeman asks a driver if he has gotten a special use permit for a vehicle. If a driver has a 64 foot rig, bumper to bumper, with a four foot light bar dangling aft, and three feet of boat hanging past that, he may be in a no win situation. Should the cop decide that the light bar is not part of the vehicle, the rig is of legal length, but has too much overhang. Should the officer consider the bar a part of the rig, overhang is no issue, but our driver now has a vehicle that is too long, and he'll need a permit.

Older trailers are also a difficult issue. Regulations allow non-dimensioned vehicles to travel the Network without special permits if they were in lawful and actual operation prior to December 1, 1982. This loophole is of use only if the vehicle was in compliance with the laws in effect at that time and in that jurisdiction. There may not be a lot of trailers that old nowadays, but there must be some. To users of older trailers, a word of caution; make sure you can document your trailer's age, and that it was in compliance with ordinances that were in force at the time it was constructed.

Avoiding headaches

Now that information is more easily available through the Internet, there really is no reason for shell trailer drivers to be inconvenienced by permit demands or traffic tickets, but steps need to be taken before the club trailer leaves the boathouse. The first item is, obviously, be familiar with the rules. Print off copies of all applicable regulations, and carry them in the trailer. Any official encountered can then see where your club gets its information, and a driver may avoid trouble by showing the ordinances under which he is traveling. At the very least, he can indicate that an attempt has been made to comply with federal regulations. Secondly, don't blow off the rules. Make sure the rig is properly loaded and dimensioned, and that it travels only on National Network approved routes. Think about modifying the trailer in such a way that it will be legal, and mark all your club boats, so that you can load them in compliance with the law. Carry a tape measure, and get in the habit of using it. Fasten loads carefully. If the rig looks like something owned by Jed Clampett, it will deserve all the notoriety it receives.

Finally, if a ticket is issued, do us all favor and fight it. Police are great all-around enforcers of the law, but shell trailers are still a rarity in their world. While it may be inconvenient to take the time and energy to appeal tickets, the evidence of compliance with the federal regulations mentioned in this article may help a driver get off. More importantly, exposure to these regulations will help the police understand the peculiar characteristics of the vehicles we drive, and they will be more sympathetic to the driver of the next rig traveling their beat.

The specific codes covering the National Network of Highways are found in the Code of Federal Regulations, Title 23-Highways. On the Internet, readers can access this information by going to: www.access.gpo.gov Pull up: Online Federal Information, Most Popular Resources. From this page, go to: GPO Access Resources; Transportation. From there, go to: Federal Highway Administration; Title 23. Sections 1 through 23 of this code cover the information on trailer dimensions and route access, and Appendix A lists all National Network roads in the system.

The Rand McNally Publishing Company prints the "Motor Carriers' Road Atlas", which shows the National Network on state maps. This atlas gives other information of interest to trailer drivers, and is updated with each yearly printing.

Mark Schofer is the boatman for Brown University.