RESCUE

B.R.A.T.™

BRUSH RAPID ATTACK TRUCK

Sold By:
Glick Fire Equipment Company
350 Mill Creek Road
Bird In Hand, PA 17505

(800) 723-1055

Date: January 1 – March 31, 2009

Built By:
Firematic Manufacturing
10 Ramsay Road
Shirley, NY 11967
631-924-3181

INTENT OF SPECIFICATIONS

It shall be the intent of these specifications to cover the furnishing and delivery of a completed apparatus equipped as hereinafter specified. These specifications cover only the general requirements as to the type of construction and test to which the apparatus shall conform, together with certain details as to finish, equipment and appliances with which the successful bidder shall conform. Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features. Loose equipment shall be provided only as stated in the following pages.

Bids shall only be considered from companies that have an established reputation in the field of fire apparatus sales and service and have been in business for a minimum of 20 years. Further, bidder shall maintain dedicated service facilities for the repair and service of products. Evidence of such a facility shall be included in bidder proposal with color photos of the interior and exterior of the facility.

Each bidder shall furnish satisfactory evidence of their ability to construct the apparatus specified and shall state the location of the factory where the apparatus is to be built. The bidder shall also show that the company is in position to render prompt service and to furnish replacement parts for said apparatus.

Each bid shall be accompanied by a set of "Contractor's Specifications" consisting of a detailed description of the apparatus and equipment proposed and to which the apparatus furnished under contract shall conform. These specifications shall indicate size, type, model and make of all component parts and equipment.

DRAWINGS

Each bidder shall supply CAD designed drawings of the vehicle as proposed. Views shall include both side front and rear. Drawings are to be included with bid. Failure to supply actual drawings as per the following specifications with the bid shall be cause for rejection of bid. Shop sketches, or hand-drafted renderings are not acceptable. Drawing shall show full pump panel detail.

No Manufacturing or shearing shall take place until the drawings have been signed off at the pre construction conference. Any final design alterations shall be at the discretion off the Board of Fire Commissioners.

QUALITY AND WORKMANSHIP
The design of the apparatus shall embody the latest approved automotive engineering practices. The workmanship shall be of the highest quality in its respective field. Special consideration shall be given to the following points: Accessibility of the various units, which require periodic maintenance, ease of operation (including both pumping and driving) and symmetrical proportions. Construction shall be rugged and ample safety factors shall be provided to carry the loads specified and to meet both on and off road requirements and speed conditions as set forth under "Performance Tests and Requirements". Welding shall not be employed in the assembly of the apparatus in a manner that shall prevent the ready removal of any component part for service or repair.

DELIVERY
Apparatus, to insure proper break in of all components while still under warranty, shall be delivered under its own power - rail or truck freight shall not be acceptable. A qualified delivery engineer representing the contractor shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in the proper operation, care and maintenance of the equipment delivered.

Each bidder shall supply the amount of working days for completion of the project as part of the proposal. Time frame shall be after receipt of chassis.

The bidders proposal shall include pricing for the entire vehicle, including chassis. This shall also provide the Fire District with a chassis price and projected availability. A discount will be provided for the pre-payment of the chassis by the Fire District upon receipt of the chassis from Ford by Firematic.

INFORMATION REQUIRED
The manufacturer shall supply at time of delivery, complete operation and maintenance manuals covering the completed apparatus as delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

PERFORMANCE TESTS AND REQUIREMENTS
A road test shall be conducted with the apparatus fully loaded and a continuous run of ten (10) miles or more shall be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts, and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus.

FAILURE TO MEET TEST
In the event the apparatus fails to meet the test requirements of these specifications on the first trial, second trials may be made at the option of the bidder within 30 days of the date of the first trial. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection. Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to the bidder of such changes, shall also be cause for rejection of the apparatus. Permission to keep or store the apparatus in any building owned or occupied by the purchaser or its use by the purchaser during the above-specified period with the permission of the bidder shall not constitute acceptance.

SPECIFICATION BID REQUIREMENTS
Bidders shall also indicate in the "yes/no" column if their bid complies on each item (PARAGRAPH) specified. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained on a separate page.

Proposals taking total exception to specifications shall not be acceptable.

Also, bidders shall submit a detailed proposal. A letter only, even though written on a company letterhead, shall not be sufficient. Bid proposals shall be submitted in the same sequence as specifications for ease of evaluation, comparison and checking of compliance. An exception to these requirements shall not be tolerated.

EXCEPTIONS
All exceptions shall be stated no matter how seemingly minor. Any exceptions not taken shall be assumed by the purchaser to be included in the proposal, regardless of the cost to the bidder.

GENERAL CONSTRUCTION
The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.

COMMERCIAL GENERAL LIABILITY INSURANCE
The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

General Aggregate	$2,000,000
Products/Completed Operations Aggregate	$1,000,000
Personal and Advertising Injury	$1,000,000
Each Occurrence	$1,000,000

Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form and shall include Contractual Liability coverage. The policy shall include owner as an additional insured as their interest may appear.

The required limits can be provided by one or more policies provided all other insurance requirements are met.

Coverage shall be provided by a carrier(s) rated "Excellent" by A.M. Bests.

UMBRELLA/EXCESS LIABILITY INSURANCE
The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate: $4,000,000
Each Occurrence: $4,000,000

The policy shall be written on an occurrence basis and at a minimum provide the same coverage's as Bidder's General Liability, Automobile Liability and Employer's Liability policies. Owner shall be included as an additional insured on the General Liability and Automobile Liability policies as their interest may appear. The required limits can be provided by one or more policies provided all other insurance requirements are met.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverage listed above along with its bid. The certificate shall be made out to the purchaser and be an original, no photocopies shall be accepted. The Certificate of Insurance shall provide that owner be given 30 days advance notice of cancellation, nonrenewable or material change in coverage.

MAXIMUM OVERALL HEIGHT
The maximum overall height of the apparatus shall be 92.00”.

MAXIMUM OVERALL LENGTH
The maximum overall length of the apparatus shall be 300”

WARRANTY
The following warranty shall be supplied with each bidders proposal and be printed on company letterhead.

The manufacturer shall warranty each piece of new fire or rescue apparatus to be free from defects in materials or workmanship under normal use and service. The manufacturer's obligation under this warranty is limited to repairing or replacing, as the company may elect, any parts thereof which are returned to them, with transportation costs prepaid and as to which examination is disclose to the company's satisfaction to have been defective.

The part, or parts, shall be returned to the manufacturer not later than one (1) year from delivery of the apparatus. Such defective part, or parts, shall be repaired or replaced free of charge and without charge for installation to the original purchaser.

15-YEAR BODY WARRANTY

The body and subframe assembly shall be warranted against defects in material and workmanship for a period of fifteen (15) years from the date of delivery.

10 – YEAR BODY PAINT WARRANTY

Exterior paint shall be covered by a lifetime warranty against cracking, chalking, peeling, hazing, and fading.

This warranty shall not apply:

1) To normal maintenance and adjustments.

2) To any vehicle which has been repaired or altered outside of the factory in any way so that, in the manufacturer's judgment, it would affect the stability. Also it shall not apply to any vehicle, which has been subject to misuse, neglect, or accident, or to any vehicle, which shall operate at any speed, exceeding the factory rated speed, or loaded beyond the factory rated load capacity.

3) To commercial chassis and associated equipment furnished with the chassis, signaling devices, generators, batteries, or other trade accessories in which they are usually warranted separately by their respective manufacturers.

This warranty is in lieu of all other warranties, expressed or implied, all others representations to the original purchaser and all other obligations or liabilities, including liability for incidental or consequential damages on the part of the company. The manufacturer neither assumes or authorizes any other person to give or assume any other warranty or liability on the company's behalf, unless made or assumed in writing by the company.

CHASSIS
2008 – Ford F-550 chassis 19,500 MGVW
Four Door Crew Cab and Chassis
4 x 4 Drive Train
Diesel Engine 6.4 L Diesel 350 H.P
5-Speed Automatic Shift Transmission
Power Steering
Power Brakes
Heavy Duty Vinyl Bucket seats front and rear bench seat
Ford F1 Red Paint
Wheel Base 176”
XLT Trim Décor- Includes Dual beam, jewel effect headlights
Power Package, Windows, Locks and Trailer Tow Mirrors
4-Wheel ABS Brakes
Driver and Passenger Air Bags
Tow Hooks
Radio ETR AM/FM Stereo with Clock
Dual 78 AH Batteries
Engine Block Heater
Dual 115 AMP Alternators
Maximum Front GAWR Package
Limited Slip 4.88 1-Axel Ratio
Air Conditioning
PTO Provision
Auxiliary Idle Kit
Daytime Running Lights
Fuel Tank Skid Plate

All modifications, equipment, maximum manpower, and carrying capacity of water must not exceed the manufacturers (Ford) maximum GVWR of 19,985 lbs.

OVERALL DESIGN

The body for the brush truck will be manufactured entirely of aluminum. The diamondette and roll up doors will be aluminum. No exceptions will be allowed in regards to the aluminum material. The body will be 120" overall length and the overall width shall not be less than approximately 94" with Super Single wheels and tires.

The 300 gallon water tank will be integral in the construction of the body and will be poly with a Lifetime guarantee.

The six (6) compartments will have Amdor roll up doors.

The pump will be a Hale 30FS driven by a 60 hp @ 2800 rpm Deutz BF3L2011 diesel engine. The pump platform will consist of a 60 hp fire pump, a black powder coated aluminum pump panel and frame, two 1 ½" outlet for rear preconnects, one 2.5" rear outlet and one 2.5" inlet.

There will be an extended front bumper with 40° ends made of 12" aluminum channel. The grille system will be made of .200 x 1.900 5086 tubing. An aluminum tube grill protection system will be bolted to the deck of the bumper.

BODY & COMPARTMENTATION CONSTRUCTION

- The body and compartmentation shall be designed and fabricated of .125 5052-H32 Aluminum. The body will be welded together with 5356 Aluminum to keep the weld from cracking.
- Formed compartment design for body strength and durability.
- All compartments shall be sweep out with no lip at the bottom edge.
- All screws and bolts that protrude into any of the aluminum shall be treated to prevent a chemical reaction causing corrosion and or paint lifting.
- The driver's and officer's side front compartment will be fitted with roll out trays on the bottom and an adjustable shelf above.
- All compartments will have rubber Dri Deck matting on the floor.
- Wheel wells will be fully lined.

SUBFRAME

- The body shall be attached to and supported by a heavy -duty aluminum sub frame.
- The sub frame shall be u-bolted to the chassis frame in the front of the body to allow for independent flexing of the body in relation to the chassis frame. The sub frame shall be bolted solid in the rear of the frame.
- ½" thick rubber is inserted between the sub fame and the chassis frame.
- The sub frame shall be caulked and under coated to prevent corrosion of the body and sub frame.
- No welding shall be allowed to the truck frame in front of the rear axles.
- **Due to the importance of sub frame flexibility and corrosion resistance; there shall be no exception to these requirements.**

INTERIOR FINISH
Compartment interiors shall be provided in a DA sanded finish.

DRIVER SIDE COMPARTMENTATION
There shall be three roll up door compartments on the left side of the body.

The forward compartment shall be approximately 30.00" wide x 55.00" high x 22.00" deep. Floors shall be sweep out design.

One (1) ceiling mounted compartment light shall be provided in this compartment, actuated by a magnetic proximity switch.

One adjustable aluminum shelf shall be provided.

One (1) non locking Amdor roll up door painted red to match the cab & body shall be provided for this compartment.

The over rear wheel compartment shall be approximately 44.50" wide x 33.00" high x 22.00" deep. Floors shall be sweep out design.

One (1) ceiling mounted compartment light shall be provided in this compartment, actuated by a magnetic proximity switch.

One (1) non locking Amdor roll up door painted red to match the cab & body shall be provided for this compartment.

The rear compartment shall be approximately 33.50" wide x 55.00" high x 22.00" deep. Floors shall be sweep out design.

One adjustable aluminum shelf shall be provided.

One (1) ceiling mounted compartment light shall be provided in this compartment, actuated by a magnetic proximity switch.

One (1) non locking Amdor roll up door painted red to match the cab & body shall be provided for this compartment.

OFFICER SIDE COMPARTMENTATION
There shall be three roll up door compartments on the right side of the body.

The forward compartment shall be approximately 30.00” wide x 55.00” high x 22.00” deep. Floors shall be sweep out design.

One (1) ceiling mounted compartment light shall be provided in this compartment, actuated by a magnetic proximity switch.

One adjustable aluminum shelf shall be provided.

One (1) non locking Amdor roll up door painted red to match the cab & body shall be provided for this compartment.

The over rear wheel compartment shall be approximately 44.50” wide x 33.00” high x 22.00” deep. Floors shall be sweep out design.

One (1) ceiling mounted compartment light shall be provided in this compartment, actuated by a magnetic proximity switch.

One (1) non locking Amdor roll up door painted red to match the cab & body shall be provided for this compartment

The rear compartment shall be approximately 33.50” wide x 55.00” high x 22.00” deep. Floors shall be sweep out design.

One (1) ceiling mounted compartment light shall be provided in this compartment, actuated by a magnetic proximity switch.

One adjustable aluminum shelf shall be provided.

One (1) non locking Amdor roll up door painted red to match the cab & body shall be provided for this compartment.

EXTENDED FRONT BUMPER
A custom built 12" deep bumper will be provided and installed with a 4 x 4 x ¼" square tube reinforcement. The bumper will be bolted to the front frame extensions with 1/2" plates.

The ends of the bumper will be returned with 40° angles and the overall width of the bumper will be two inches wider than the cab. The deck will be covered with four-way 3003 aluminum diamondette. The center will have a recessed mount for winch attachment.

Two 10,000 lbs eyebolts will be mounted in two large oval cutouts on the front of the bumper with the eyebolt protruding in front of the face of the bumper for ease of use.

On top of the extended bumper additional grille and body protection tubing and mesh assembly will be installed with grade (8) bolts. The tubing will have (8) bolt on flanges and will be made of 5086 – 1.900 OD x .200 wall tubing. All the bends will be wrinkle free and all the welds will be by TIG welding process. The front opening will be closed with heavy-duty 3/16" hinged aluminum mesh.

At the center of the bumper a reinforced mount will be provided for the winch. The entire bumper assembly will be made of aluminum and powder coated black.

WATER TANK
The water tank will be of Poly material and will have a lifetime guarantee. The tank will be of rectangular design 46" wide x 60" length x 31" high and holds 300 gallons of water.

The tank will have a bucket fill hinged door located at the forward portion of the tank. The water tank will have a 4" overflow thru the floor of the tank and will be part of the top fill box assembly.

A tank to pump line will be provided via a 3" NPT bushing. The bushing will be installed at the rear of the tank on the driver's side one inch from the floor and two inches in from the left side.

A tank refill line will be provided in the center of the rear wall 23" from the floor, the bushing will be 1 ½" NPT.

A Fire Research water level indicator (5) lite will be installed on the pump console and a mini indicator shall be supplied in the custom console in the cab.

External mounts front and rear will be installed integral with the tank and bolted to the deck sandwiching ½" #70 durometer rubber. The tank will have a front and rear two bolt "L" bracket mount that is an integral part of the tank.

The tank will be mounted with these brackets through the body cross supports and custom ¼" aluminum brackets that are part of the body substructure.

PUMP
Provide a Hale 30FS pump driven by a Deutz BF3L2011 60 hp @ 2800 rpm diesel engine. The pump will provide approximately 300 GPM at 150 PSI and 100 gpm at 300 psi. No exceptions will be allowed on the pump and engine.

The pump will be wired and piped to the Ford electric and fuel system. A control console will be installed at the rear of the truck to the right side of the engine. The console will hold master 12-volt switch, start, stop, throttle, oil pressure, water temperature, main water inlet and outlet pressure and water level indicator, night-light. A separate 12-volt alternator will be part of the pump and will provide 65 amps of output.

A Fire Research Pro S series electronic governor will be installed to govern the engine on rpm and pump pressure.

The engine will be equipped with a 12-volt starter. The main inlet will be 3" NPT and the main discharge will be 2" NPT.

PIPING
A 3" tank to pump line will be installed with an electric ¼ turn valve located at the tank. A check valve will be installed between the valve and the pump with the check towards the tank.

A 2.5" aluminum manual valve with chrome ball handle will be installed at the pump inlet. It will have a female chrome swivel with cap and be NH thread. It will be installed on a flange welded to a tee at the inlet of the pump. This line will allow positive water to the pump from another apparatus or hydrant.

DISCHARGE MANIFOLD
An all stainless steel 304 L 3" square manifold will be supplied. The manifold will have mounting legs made of ¼" 304 L – stainless steel as well as the two ends which will be ¼" 304 – L – also. The manifold will be TIG welded and tested to 400 PSI.

All of the discharge flanges will be stainless steel and welded to the top surface. The flanges will be installed to allow sufficient room for the discharge valves. A drain valve will be installed in the bottom and piped via hose to below the frame rails. The manifold will supply one 2 ½" direct discharges out the rear and two 1 ½" outlets for upper preconnects above the pump.

A separate 1 ½" tank fill line and valve will be piped from inlet side of the pump.

PRECONNECTED DISCHARGES
A Double Preconnect hosebed shall be provided at the upper right center of the body, above the pump panel. Each 1-3/4" is to be connected to a 2" stainless steel Hale Torrent in-line valve and terminate with an 1.5" NH hose connection.

Valves to be operated by a pump panel mounted pull control. A 2 1/2" liquid filled gauge shall be connected to each discharge and installed above the operating handle.

Beds to hold a minimum of 200' of 1 ¾" fire hose.

DRAIN VALVES
A Master Drain Valve shall be installed and operated from a drain panel area below the pump panel. The valve shall be mounted lower than the main pump compartment.

COLOR CODED TAGS
Color coded tags shall be provided on all discharges, intakes, operating valves, drain valves and gauges. Specific colors (in accordance with the recommendations contained in Appendix A, of NFPA 1901) will be provided at the preconstruction conference.

Specific legends will be provided at the preconstruction conference.

FIRE RESEARCH ELECTRONIC PRESSURE GOVERNOR
The pump discharge pressure and engine RPM shall be controlled by an all electronic Fire Research Pro S pump pressure governor with optional audible alarm buzzer. (No Exception). A PSI/RPM mode Switch, PSI/RPM increase/decrease switch and shutdown switch that returns the engine to idle shall be provided. (NO EXCEPTIONS)

A pump cavitation protection feature shall also be provided which will return the engine speed to idle should the pump cavitate. Cavitation shall be sensed by the combination of the pump pressure being below 30 psi and the engine speed above 2000 rpm for 5 seconds.

MASTER GAUGES & CONTROLS
The pump vacuum and pressure gages shall be a minimum of 4.5" in diameter. Gauges are to have a pressure range of 30-0-400.

The following controls shall be mounted on the pump panel:
- An engine throttle control (Pressure Governor)
- Pump suction and discharge test plugs

WATER TANK CONNECTIONS
The tank shall be connected to the intake side of the pump with a full flow, 3" valve and plumbing capable of 350 GPM. A check valve shall be installed to prevent backfilling of the tank.

A minimum 1.5" tank fill line shall be provided from the discharge of the pump and controlled form the pump panel.

PUMP PANEL
There will be an aluminum pump housing and panel covering the pump. The top portion of the panel will hold the Class 1 pull controls for the preconnects. The main lower portion will be hinged at the top and swing up for easy access.

HOSE AREA ABOVE PUMP
There will be a 24"W x 11"D x 90"L hose bed to hold 500 ft of 2.5" deadlay hose.

A 15"W x 11"H x 90"L area with a divider will be two preconnects and hold 200" of 1.75" hose each. Both are mounted over the pump compartment roof and water tank. Access to water and foam tanks will be behind hose area via fill domes.

In the deadlay bed will be a 12" W x 48"L aluminum chimney offset to the passenger side to allow for cooling of diesel pump engine.

REAR STEP
Provide a rear step approximately 12"D x 60"W, with a 24" step height. There shall be a complete steel substructure designed to provide a departure angle of more than 15 degrees.

The structure shall also be designed to accommodate the weight ratings associated with a class three hitch. The hitch shall be centered under the rear step bumper.

The entire rear step assembly shall be covered in NFPA compliant slip resistant aluminum diamond plate.
The rear step assembly shall also have tube style struts, which stretch from chassis to rear outer edge of bed.

This structure shall have aluminum diamond plate backing for the mounting and protection of the FMVSS lights.
There shall be two rear step weldments provided, to allow the use of the winch snatch block.

SIDE STEP
At the front of each cab door provide a 10" deep step of .200 5086 tubing that will be attached directly to the chassis with 1.900" aluminum tubing, which will be removable.

The rear of the tube will have a 180 degree turn and be bolted to a stanchion that is bolted to the frame. The top of the step will be removable aluminum diamondette. The step will not extend wider than the truck body.

WIRING CENTER
An all Aluminum #3003 alloy console will be manufactured and powder coated black. The console will hold all band radios, siren controls, and lighting controls in the front portion. The console will be permanently installed between the two front bucket seats.

The rear section of the console will have a removable top & side door for access to all 12v electric equipment, wiring & controls for the entire fire body & equipment.

LIGHTING
Roof light – A Whelen LIberty led light bar will be installed with clear lenses with two take down lights in the front and two alley lights one on each side. All bulbs will be LED.

Grill lights – Whelen grill lights will be provided. The lights will be 500 Red TIR6 Super LED, mounted on the truck grill area in aluminum housings.

Winch lights – Two 12 volt lights with integral switches will be provided and installed next to the front class four hitch.

Side lights - . Two lights will be 500 red super LED, mounted on the truck grill area in aluminum housings facing out. Two lights will also be Whelen 600 series mounted on the body above the wheel well.

Rear lights – Two Whelen B6T rotators with strobes, one red and one amber will be mounted to the top of the two rear wall compartment corners. On the rear compartment walls below the rotators will be mounted two 150 watt 12 volt DC telescoping scene lights.

On the bottom of the rear body will be a triple cluster rectangular brake, tail, and directional lights will be mounted vertically on the rear of the body. The lights will be three Whelen 600 series mounted in their own polished aluminum for protection.

A back up alarm will be provided and installed.

SIREN SPEAKER
A Whelen SA315P Speaker /Siren will be installed under the front bumper.

LETTERING
The doors of the cab will have lettering as per the Fire Districts designation. A white scotchlite stripe will be installed down the truck on each side and along the rear.

There will be “Keep back 200 ft.” on the rear deck of the truck. All letters will be vinyl in color of departments choice.

A Maltese cross matching the departments existing shall be provided and installed on the cab doors

45 vinyl letters shall be supplied and install as per the direction of the board of fire commissioners.

WINCH
A Warn X9.5ti portable winch will be mounted in the passenger side front compartment on the floor with high density plastic slides and a shelf mounted above. A remote control for the winch will be supplied.

WHEELS AND TIRES
The apparatus will be delivered with special steel wheels to allow single rear wheels and new front wheels. The wheel offsets will be adjusted for aligning the front and rear truck width to within 1/8”.

The wheels will be custom made of steel.
The centers will be .500 thick. They will be machined on both sides to be parallel and will be of the Hub piloted design.

The outside rims will be 1 piece steel with the centers machine welded to the rim.

The original Ford wheel studs will be used with the stock flange nuts securing the wheel to the apparatus at 120 Ft/Lbs of torque.

The offset to the front and rear rims will be adjusted to allow tracking front to rear within 1/8”.

The wheels will be powder coated to match the cab color.

All tires installed will be Michelin H 285 70R/19.5 XDE-2.
All tires and rims to be balanced.

WHEEL TESTING
A certified 3rd party test certificate will be required. The test company must be recognized as current in testing automotive products, especially rims.

The test will show the following requirements to SAE-J-267.

Corner fatigue testing on a moveable jib that while rotating full left and right turns will be performed while a load of 6684 lbs is applied at 500 RPM.
100,000 Left and 100,000 Right turns
Required Flatness test at beginning .000 x 3
Required Flatness test at end .000 x 3
A dye test on the welds will be required.
Min. hours to run test – 3.3
Radial fatigue (rear wheels)
Test weight of 8925 LBS imposed
1,000,000 cycles
20 MPH
Required Flatness before test .000 at 3 places
Required Flatness after test .000 at 3 places
Checked at 1 million cycles
Minimum hours to run check – 105 hours

FEA – FINITE ELEMENT ANALYSIS
Additional testing of the four wheels will be provided.

A full analysis will be provided.

The analysis will show:
Complete stress analysis, fatigue, center deflection safety factors

The test will be produced by the bidders in house engineering computer department, utilizing the latest FEA programming and backed by the bidders Liability Insurance.

The wheels will be tested and certified to third party testing and will be tested to SAEJ267 specs.

The test will consist of a cornering fatigue test as well as a radial fatigue test. Certification will be provided.

TIRES
Michelin radial load range H 285 70R/19.5” XDE 2 tires will be installed on the special rims. Brass valve stems will be required. The entire rim and tire will be balanced. The rims will be painted to match the Ford paint. Inflation pressure will be 110 psi and will support 6250 lbs each wheel and tire.