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## ELECTRICAL CONTRACTORS, INC.

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### **Purpose**

PAR believes in creating a safe and healthy workplace for all of its employees. To accomplish this goal PAR has asked that its helicopter providers take several precautions which are over and beyond FAA regulations. In most cases these precautions are industry standard for the utility helicopter industry. In other cases they are best practices.

Safety of certain issues in aviation is subjective. In these cases PAR has chosen to not issue any specific requirement so that the helicopter operator can do what it feels to be in the best interest of safety.

PAR utilizes helicopters for many things. Requirements are broken down into general requirements that apply to all operators, external load requirements that apply to all operators that perform external loads, and other requirements based on certain specialized types of work.

PAR has extensive experience working with and around helicopters and has learned many valuable lessons regarding the safe utilization of helicopters in power line construction and repairs. PAR firmly believes these requirements will allow for the safest possible work environment for its employees and its contractors.



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### **Requirements for Helicopter Contractors – General**

Some requirements will vary job to job. Certain requests, such as containment for fuel trucks or satellite tracking for aircraft are sometimes requested by the customer and passed along to the helicopter operator. In addition to the requirements in this document, please comply with any job specific requirements in a timely fashion.

#### **Requirements for Pilots**

- All pilots shall be enrolled in an ongoing drug and alcohol testing program.
- All pilots shall receive training, (in house or otherwise) on safe navigation in the low-level wire environment.
- All pilots in in command shall have at a minimum 2000 flight hours in rotorcraft 250 flight hours on type.
- All accidents, incidents, and near misses shall be reported to PAR management as soon as possible. Accidents are NTSB or OSHA reportable events. Incidents include any injury to any person that requires any medical treatment or damage to property (including the aircraft or PAR property) that is not classified as an accident. Near misses are other anomalies that did not result in injury, or damage, but had the potential to do so, (e.g. Inadvertent hook releases, potential rotor contact, loss of cargo or any item in flight, load entanglement, etc.).

#### **Aircraft Requirements**

- Turbine helicopters only shall be utilized on PAR projects.
- All aircraft shall have the radios necessary to communicate with PAR ground personnel handheld radios.

#### **Maintenance Requirements**

- All aircraft based away from maintenance facilities shall be inspected by an A&P mechanic on a regular basis. It is expected that a daily inspection by an A&P mechanic be considered the norm.
- Power checks shall be performed every flying day and shall be trended to ensure engine health.



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### Requirements for External Load Operators

#### General Requirements

- No PAR personnel will be allowed onboard the aircraft during class B external load operations.

#### Requirements for Pilots

- All pilots in command shall have at minimum 100 hours of vertical reference external load time in the type of helicopter they are to fly on the PAR project.

#### Aircraft Requirements

- All cargo hooks shall be approved by the aircraft manufacturer or a supplemental type certificate and shall have a flight manual supplement that allows for the external load classes for which it is to be utilized.

#### Maintenance Requirements

- Cargo hooks related release systems shall be inspected and tested daily.

#### Equipment Requirements

- All longlines shall have ultimate break strength of at least 5 times the maximum rated external load of the aircraft it is utilized on.
- All synthetic longlines, (The line itself, not the cover) shall be inspected daily.
- All synthetic longlines shall be stored in a manner that keeps them clean, dry, and protected from extra wear.
- All longlines and grapple hooks made in house shall be marked with a maximum load rating and shall have testing or engineering data to substantiate that rating.
- Sufficient weight shall be added to the end of all longlines to keep them well clear of the tailrotor in forward flight.
- Where practical, Dyneema or otherwise non-conductive longlines shall be used. When working within Minimum Approach Distances to energized lines sufficient insulating materials shall be added to the longline to insulate the voltage of the energized line in the event of an inadvertent contact with two phases, or one phase and ground.
- Use of a belly band or personal safety device with non-human cargo is not permitted unless the release is located on the primary flight controls.



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### **Requirements for Specialized Line Work** – (Skid or Platform Work, Human External Cargo, Tower Transfers, Wire Stringing, ETC)

#### **General Requirements**

- For projects where pilots are to train PAR linemen on the work to be performed, a written manual, training curriculum, or standard operating procedures shall be provided, and shall be utilized to standardize training.
- No more than two (2) linemen may ever be carried as an external load.

#### **Requirements for Pilots**

- All pilots in command shall have received in house training, and shall have been deemed proficient in the tasks they are to perform. Records shall be made available to PAR on request.

#### **Aircraft Requirements**

- For wire stringing, MD500/600 series aircraft with a side pull shall be utilized. Note: (exceptions will be made for small jobs where an operator proficient in belly-hook stringing can be found).
- Class A external load attach points shall be approved as such by the FAA either by supplemental type certificate or field approval (FAA Form 337) and be placarded for its maximum load rating.
- No skid or platform work or transfers will be attempted without a FAA approved Class A external load attach point.

#### **Equipment Requirements**

- For skid or platform work, a means of electrically bonding the helicopter to the line/structure shall be provided.
- For skid work/tower transfers Linemen will use PAR's Standard PPE package:
  - ANSI Z89.1 approved helmet or hard hat with three point chin strap.
  - ANSI Z87.1 safety glasses.
  - Approved fall protection.
  - ANSI Z359.1 shock lanyard or similar (personal fall arrest system).
  - Cotton, Nomex, FR clothing or appropriate job-specific clothing.
  - Work Gloves.
  - Hearing Protection.
  - Work Boots.



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- For Human External Cargo, a redundant (secondary) system, authorized by the FAA, shall be used to catch the load in the event of a primary hook failure or inadvertent activation of the primary hook release.