QUALIFICATION RECORD

	Performed Following all Required Procedures		Evaluator	Date	Vegetation			Height		
	Cargo	Rappellers			Timber	Brush	Open	Low	Medium	High
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
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31										
32										

HERS Final Evaluation

HERS (T) Name	Duty Station	Phone Number
Name of Check Spotter	Duty Station	Phone Number

Check spotter will utilize the following demonstrated competency check list for evaluating trainee spotters.

The final evaluation will include a minimum of three (3) cycles with cargo at low, medium and high altitudes in typical terrain. Evaluation may occur in simulated or incident operations.

Demonstrated Competency

Rating Definitions and Requirements:

P=Pass, **F**=Fail

Spotter Trainee must achieve a **Pass** rating in all tasks to be eligible for approval to a Helicopter Rappel Spotter. A **Fail** rating for any task may end the evaluation at that point. Re-evaluation by a check spotter may occur at a later date once HERS (T) has received corrective training from a qualified rappel spotter.

	Helicopter Spotting	Pass	Fail
1	Perform pre-flight risk assessment and mitigation to include manifests, load calculation, weather, fuel quantity, flight hazards, and communications.		
2	Conduct comprehensive and appropriate pre-flight briefing with crew and pilot to review operations, risk management, and communications.		
3	Properly configure helicopter, per requirements, with rappel and cargo equipment.		
4	Demonstrate ability to operate radios and effectively communicate with dispatch or appropriate flight following authority and with ground and air resources (if present.)		
5	Perform proper high and low level reconnaissance of rappel area. Assure helicopter capabilities and limitations under given altitude, temperatures, weather conditions, and payload.		
6	Select primary and alternate rappel sites considering terrain, obstacles, winds, fire behavior and hazards.		
7	Demonstrate proper spotting techniques and sequence including equipment checks, hand signals, and verbiage with pilot without procedural error. Communication with pilot must be clear, effective, and concise.		
8	Demonstrate proper cargo configuration and deployment procedures.		
9	During rappel and cargo deployment, keep pilot/helicopter over rappel site with minimal movement.		
10	Deliver rappellers and cargo within plus or minus 10 feet from target, clear of trees and obstacles.		
11	Demonstrate command of all aspects of the rappel and cargo operation, making prompt decisions, and giving appropriate directions as needed.		
12	Conduct post rappel debriefing with crew and pilot emphasizing planned and actual events and what to reinforce or improve for next time.		

Notes: _____

HERS Trainee has met all requirements and performed all aspects of the evaluation to the satisfaction of the evaluating check spotter.

Yes_____ No_____

Recommendation: _____

_____ _____

Recommended By Rappel Check Spotter Date

_____ _____

Reviewed By Regional HOS or Agency Equivalent Date

_____ _____

Certified By Certifying Official or Agency Equivalent Date

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Form F-10 – Equipment and Procedure Proposal Form

EQUIPMENT AND PROCEDURES PROPOSAL

Date: **Submitter** **Name: Region:** **Base:** **Phone** **: E-** **Mail:**	**Brief description of item or procedure including source for equipment:**

EQUIPMENT APPLICATION *(Describe what this piece of equipment would be used for. Include drawings or pictures.)*

POTENTIAL BENEFITS *(Describe how this equipment or procedure would benefit rappel or cargo letdown operations.)*

PROCEDURES *(Describe procedure propose or explain how new equipment may change or add procedural steps. Include your version of how procedures could be written.)*

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Form F-11 – Rappel Tower Condition Assessment Checklists

RAPPEL TOWER
ANNUAL PRE-USE CONDITION
ASSESSMENT CHECKLIST FORM
(To be completed by the Base Manager or Designee)

Tower Location: _____

Date of Inspection: _____

Inspected by: _____

Tower and Simulator - Overall Condition		
Yes	**No**	**Remarks**
Is the tower or simulator leaning or twisted?		If the tower or simulator is leaning or twisted, it should not be used and engineering should be contacted immediately.
Are there any broken or hanging members?		Any broken or hanging member will be required to be fixed before the tower can be used. Fixing major members may require a special inspection by the Regional Bridge Engineer or a qualified representative.
Are there any obvious missing parts?		Any missing parts will have to be replaced before the tower can be used.
Are all "X" bracing rods straight?		If any rod is bent or curved, this is an indication of a problem and the tower should not be used until the reason for the bent rod is found and corrected.
Is the lightning protection system intact and functional?		Lightning protection system must be functional before the tower can be used.
Is the aircraft warning light system working?		The warning light system must function at all times and the tower may be not used when they are not functional.

Tower			
	Yes	**No**	**Remarks**
Are all faying surfaces at all connections in firm contact?			If faying surfaces are not in firm contact, this may be an indication of movement of the tower or twisting or bending of a beam.
Are all grating properly installed with adequate attachment to supporting framework?			Any lose grating must be secured to the supporting framework before the tower can be used.
Are all anchor rods and bolts snug and tightened to 200 ft.-lbs. torque?			If any rod is bent or curved, this is an indication of a problem and the tower should not be used until the reason for the bent rod is found and corrected.
Is at least one full thread for all bolts and anchor rods projected beyond the face of the nut?			If at least one full thread does not project beyond the face of the nut, this could be an indication of a problem and the tower should not be used until the reason is found and corrected.
Are "X" bracing rods installed under tension with no detectable sag?			If any rod is bent or curved, this is an indication of a problem and the tower should not be used until the reason for the bent rod is found and corrected.
Is the tower plumb and free from twisting or racking?			If the tower or simulator is leaning or twisted, it should not be used and engineering should be contacted immediately.
Are all members in good repair, checked for missing, cracked or broken parts?			Any broken or hanging member will be required to be fixed before the tower can be used. Fixing major members may require a special inspection by the Regional Bridge Engineer or a qualified representative.
Do all gates have properly working closing mechanisms and latches?			All gates must work and provide protect from entering areas where falling can occur before the tower can be used.
Are all handrails present to provide fall protection?			Any missing parts will have to be replaced before the tower can be used.
Have all the anchor points for rappellers and spotters been removed and NDT'd or replaced and been installed per manufacturer's recommendations?			This can be done by tapping on the bolts with a carabineer and if they are loose, they will rattle or checked with a torque wrench.
Has all damaged paint been repaired?			Damaged paint should be repaired as soon as possible to help increase longevity of the tower.

Simulator		
Yes	**No**	**Remarks**
Are all faying surfaces at all connections in firm contact?		If faying surfaces are not in firm contact, this may be an indication of movement of the simulator or twisting or bending of a beam.
Are all grating properly fastened to supporting framework?		Any lose grating must be secured to the supporting framework before the tower can be used.
Are all members square, true and plum?		If members are not square and plum for the simulator, it should not be used and engineering should be contacted immediately.
Do all gates and doors work properly and have properly working closing mechanisms and latches?		The doors must slide easily, latch and provide safety when closed.
Have all weep holes been cleaned out?		Weep holes need to be open to allow any moisture that gets into the HSS to drip out.
Have all the anchor points for rappellers and spotters been removed and NDT'd or replaced and installed per manufacturer's recommendations?		This can be done by tapping on the bolts with a carabineer and if they are loose, they will rattle or checked with a torque wrench.
Have all long and short plates, skid and J step been inspected? Include non-destructive testing method to identify cracks (minimum to be liquid dye penetration testing), check for bend, twist and racking.		All plates must be checked each year before the tower can be used.
Has all damaged paint been repaired?		Damaged paint should be repaired as soon as possible to help increase longevity of the simulator.

If any of the questions have been answered with a **"No"**, the problem **must be fixed** before any training is allowed on the tower.

RAPPEL TOWER

DAILY PRE-USE CONDITION ASSESSMENT CHECKLIST FORM

(To be completed by Base Manager or Designee)

Tower Location: _____

Date of Inspection: _____

Inspected by: _____

The tower and simulator will require a daily condition assessment when in use for the overall appearance of the tower. At a minimum, it should consist of the following questions:			
Conditions	**Yes**	**No**	**Remarks**
Is the tower or simulator leaning or twisted?			If the tower or simulator is leaning or twisted, it should not be used and engineering should be contacted immediately.
Are there any broken or hanging members?			Any broken or hanging member will be required to be fixed before the tower can be used. Fixing major members may require a special inspection by the Regional Bridge Engineer or a qualified representative.
Are there any obvious missing parts?			Any missing parts will have to be replaced before the tower can be used.
Are all "X" bracing rods straight?			If any rod is bent or curved, this is an indication of a problem and the tower should not be used until the reason for the bent rod is found and corrected.
Have the tower and simulator been assessed for rough edges, burrs or other aspects that may cause damage to ropes before use?			All rough edges, burrs or other aspects that may cause damage to ropes and equipment must be removed or mitigated before the tower can be used.
Is the landing area free of obstructions and hazards?			The landing area must be free of obstructions and hazards before the tower can be used.
Has the landing area been loosened up prior to use?			No rappelling will be allowed if the rappel landing area is too hard and may cause knee and ankle injuries.
Is lightning protection system intact and functional?			Lightning protection system must be functional before the tower can be used. **THE TOWER CANNOT BE USED DURING ANY KIND OF STORM.**

Conditions	Yes	No	Remarks
Is the aircraft warning light system working?			The warning light system must function at all times and the tower may be not used when they are not functional.
Are stairs, walkways and landings clear of snow, ice and debris and in good condition?			All snow, ice and debris must be removed before any training is allowed on the tower.
Are all landings and tower decks free of trip/slip hazards (e.g., water, protruding bolts)?			All hazards will have to be removed or mitigated before the tower can be used.
Is the railing system complete and in good condition?			Any missing parts will have to be replaced before the tower can be used.
Are toe boards installed in all areas where personnel could pass underneath?			Any missing parts will have to be replaced before the tower can be used.
Are all areas that pose a tripping or head hazard marked in yellow?			All areas that pose a tripping or head hazard must be marked with yellow paint or tape before the tower can be used.
Are the access control gates and latches present, functional and in good working condition?			All gates must work and provide protect from entering areas where falling can occur before the tower can be used.
Have the rope anchors been checked for distortion and tightness of bolts?			This can be done by tapping on the bolts with a carabineer and if the bolts are loose, they will rattle or can be checked with a torque wrench.
Have all required anchors for rappellers and spotters been installed?			The lower platform should be setup before rappellers are allowed on the lower platform.
Is the tower plumb and free from twisting or racking?			If the tower is leaning or twisted, it should not be used and engineering should be contacted immediately.
Are all members in good repair - check for missing, cracked or broken parts?			Any broken or hanging member will be required to be fixed before the tower can be used. Fixing major members may require a special inspection by the Regional Bridge Engineer or a qualified representative.
Are all grating properly attached to supporting framework?			Any lose grating must be secured to the supporting framework before the tower can be used.
Have the past day's use been reviewed and any high wind speeds, seismic events, falls during training and any other unusual events been noted?			The previous day's paper work must be reviewed. Any problems from the day before must be fixed before the tower can be used.
Is the simulator clear of snow, ice and debris and in good condition?			All snow, ice and debris should be removed before any training is allowed on the tower.

Conditions	Yes	No	Remarks
Is the railing system complete and in good condition?			Any missing parts will have to be replaced before the tower can be used.
Are all grating properly attached to supporting framework?			Any lose grating must be secured to the supporting framework before the tower can be used.
Are the access control gates and latches present, functional and in good working condition?			The gates must control access to the simulator; if they do function correctly the tower should not be used until fixed.
Have the rope anchors been checked for distortion and tightness of bolts?			This can be done by tapping on the bolts with a carabineer and if they are loose, they will rattle or checked with a torque wrench.
Have the simulator doors and latches been checked that they function correctly and are in good working condition?			The doors must slide easily, latch and provide safety when closed.
Have all required anchors for rappellers and spotters been installed?			The simulator should be setup before rappellers are allowed in the simulator.
Have the long and short plates, skid and J-step inspected for signs of distortion?			The plates may not be used if they show and signs of distress until they have been inspected by a qualified engineer.
Other Items Noted:			

If any of the questions have been answered with a **"No"**, the problem **must be fixed** before any training is allowed on the tower.