

Appendix C – Forms

On the following pages of this appendix are forms to be used for rappel program documentation purposes. Equipment records and Rappeller and Spotter Unit Logs shall be documented in either the hard copy forms provided in this appendix or in an electronic equivalent. For initial certification and recertification documentation, the forms provided herein will be completed and maintained.

These and the additional forms provided will allow individual rappel programs to organize and document the histories of equipment and training. They were designed to contain all of the pertinent information that has been recommended or required by this guide.



Form C-6 Rappeller Training Record – Initial Rappeller Training

(FS505)

Assigned To:

Trainee's Name

Duty Station

Certified By:

**Helicopter Rappel Check Spotter
or Agency Equivalent**

Date

I. Initial Rappeller Training Record – Signatures

Name: _____
 Year: _____
 Crew: _____

Lesson 1 – Equipment Orientation, Issue, Fit & Suspension (Home Unit)			
Lesson 2 – Program Overview and Equipment Review (Classroom)			
Lead Trainer Initials			
Lead Trainer Initials	Pass	Fail	Comments
Lesson 4 - Ground Training			
Lead Trainer Initials	Pass	Fail	Comments
Lesson 5 - Spotter Checks			
Lead Trainer Initials	Pass	Fail	Comments
Lesson 6 - Ground Simulator			
Lead Trainer Initials	Pass	Fail	Comments
Lesson 7 - Elevated Simulator			
Lead Trainer Initials	Pass	Fail	Comments
Lesson 8 - Mock-Ups			
Lead Trainer Initials	Pass	Fail	Comments
Lesson 9 - Live Helicopter Rappels			
Lead Trainer Initials	Pass	Fail	Comments
Final Check Spotter Certification			
Check Spotter's Printed Name		Check Spotter's Signature	
		Date	

II. Instructions for Completing Initial Rappeller Training Documentation

All initial rappeller training will be conducted under the supervision of a qualified spotter with check spotter oversight. Elements must be presented and performed in sequential order. Each training element will be assessed and signed off by the evaluating spotter. Comments shall be included in the space provided to ensure appropriate documentation of performance and to provide feedback to trainees. Each requirement of the Rappeller Training Record shall only be signed off once the trainee demonstrates adequate knowledge and understanding of the standards or receives the appropriate training.

Trainees will be assigned to squads and will be overseen by a squad leader. Squad leaders are accountable for tracking rappellers' progression through all stations, communicating with lead instructors, and maintaining the wellness of the squad. The squad leader is responsible for accurately documenting all necessary information in each candidate's training documentation. It's critical that the squad leader accurately documents penalties and captures notes on continual errors by utilizing the provided tracking sheets. Squad leaders must maintain timely communications with the spotter trainers. Squad leaders shall not assess any penalties without direct consultation from a qualified spotter first.

A. Errors Which Invoke Penalties

A system of penalties is incorporated into rappel training starting at stage two of ground training. During the initial elevated simulator training, penalties will not be applied until the candidate has completed **three** rappels. Penalties will not be assessed until the candidate has completed **two** high tower rappels. Evaluating spotters will determine what action is required. Three minor penalties constitute one major. Three majors will be grounds for a candidate's immediate removal from training. Major and minor penalties will reset once a candidate advances to live helicopter operations; however, continual errors will carry into live rappel operations. One major penalty during live operations will remove a candidate from training.

1. **Majors**: Mistakes made by the candidate that, if left uncorrected, could cause serious injury or death to the candidate or put the aircraft and crew at serious risk.
2. **Minors**: Mistakes made by the candidate which, if left uncorrected could jeopardize or delay the rappel procedure and/or damage equipment or PPE.
3. **Continual**: A "**continual**" error is defined as an error that occurs three or more times. After two warnings for the same error, the third occurrence and any thereafter are considered continual errors and at this point the candidate shall be assessed the appropriate penalty.

B. Appropriate Documentation

1. **Notes/Comments:** Make necessary comments specific to each training revolution in the provided space next to the evaluating criteria. If necessary, utilize the expanded notes page provided. It is critical to capture accurate notes once the feedback is provided by evaluating spotters.
2. **Pass/Fail:** To be determined by the evaluating spotter. The candidate must meet the objectives in the Rappel Training Syllabus prior to moving on to ground training.
3. **No Errors:** If there are no elements assessed as unsatisfactory, then the “no errors” box shall be checked. If an evaluating spotter doesn’t specifically mention that there was an unsatisfactory element, then it can be assumed that the revolution had “no errors.” Ask an evaluating spotter for clarification if necessary.
4. **Unsatisfactory:** If there is a deficiency in one of the evaluating criteria starting at low tower training, it shall be marked “unsatisfactory” by placing a “U” in the appropriate box and a comment shall be provided. If an element is assessed as “unsatisfactory,” the “no errors” box shall not be checked. Only an evaluating spotter may assess an “unsatisfactory.”
5. **Continual Error:** When continual errors begin to be assessed, they shall be documented through accurate notes and tracked on the provided documentation. Remember to capture the first two unsatisfactory performances and the resulting penalty on all occurrences thereafter. Continual errors may only be assessed by the evaluating spotter. Have discussions as needed with the evaluating spotter for clarification or direction on penalty documentation. If the squad leader observes continual errors that aren’t being recognized by the spotter trainers, then bring it up to the lead trainers at the appropriate time and place.
6. **Minor Penalty:** When a minor penalty is assessed by an evaluating spotter, the element shall be rated as “unsatisfactory” with a “U” and be accompanied by accurate notes on the occurrence in the provide space. Track the minor penalty on the provided documentation by checking the numbered boxes as the errors occur. It’s critical to remember that three minors constitute one major, making it very important to keep evaluating-spotters apprised of the candidates’ penalty status as they progress through training.
7. **Major Penalty:** When a major penalty is assessed by an evaluating spotter, the element shall be rated as “unsatisfactory” with a “U” and be accompanied by accurate notes on the occurrence in the provided space. Track the major penalty on the provided documentation by checking the numbered boxes and writing what the error was as it occurs. It’s critical to remember that three majors will remove the candidate from training, making it very important to keep evaluating-spotters apprised of the candidate’s penalty status as they progress through training. A check spotter shall be involved in assessing any major penalties.

Rappel #	Notes

VI. Initial Rappeller Training Record – Mock-Ups

<p>If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box. If no boxes are marked unsatisfactory, place an "x" in the no errors box.</p>														<p>Minimum Requirements 1. Perform helicopter mock-up rappels and re-entry procedures as initiated by the spotter, until proficiency is demonstrated from all seating positions 2. An error free re-entry is counted toward the total number of successful mock-ups. *The minimum number could be as little as four successful mock-ups</p>													
Rappel #	Equipment Care	Buddy Check	Spotter Check	Inspect Rigging	Seatbelt	Rappeller Tether	Response to Spotter Signals	Rig Descender	Transition to Skid	Clear Rope	Remove	Exit Off Skid	No Errors *	Comments													
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
Error Free Cycle Completed							<input type="checkbox"/> Inside Right <input type="checkbox"/> Inside Left <input type="checkbox"/> Outside Right <input type="checkbox"/> Outside Left							Error Free Re-Entry							<input type="checkbox"/> Right Side <input type="checkbox"/> Left Side						

Form C-6.1 Rappeller Transition Training Certification Record

Name: _____

Year: _____

Crew: _____

Training Location: _____

Program Overview and Equipment Review			
Classroom Session			
Buddy Checks			
Lead Trainer Initials	Pass	Fail	Comments
Ground Training			
Lead Trainer Initials	Pass	Fail	Comments
Ground Simulator			
Lead Trainer Initials	Pass	Fail	Comments
Elevated Simulator			
Lead Trainer Initials	Pass	Fail	Comments
Mock-Ups			
Lead Trainer Initials	Pass	Fail	Comments
Live Helicopter Rappels			
Lead Trainer Initials	Pass	Fail	Comments
Final Check Spotter Certification			
Check Spotter's Printed Name	Check Spotter's Signature		Date

II. Rappeller Training Record – Ground Simulator

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box. If no boxes are marked unsatisfactory, place an "x" in the no errors box.														Minimum Requirements 1. Minimum of 6 ground simulations 2. During stage one a minimum of 1 error free cycle from each seat 3. During stage two a minimum of 1 error free re-entry from each side Penalties will be assessed after the students 3rd ground simulator cycle	
Rappel #	Equipment Care	Buddy Check	Spotter Check	Inspect Rigging	Seatbelt	Rappeller Tether	Response to Spotter Signals	Rig Descender	Transition to Skid	Clearing of Rope	Remove Rappeller Tether	Exit Off Skid	No Errors *	Comments	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
Error-Free Cycle Completed <input type="checkbox"/> Inside Right <input type="checkbox"/> Inside Left <input type="checkbox"/> Outside Right <input type="checkbox"/> Outside Left								Error Free Re-Entry Completed <input type="checkbox"/> Right Side <input type="checkbox"/> Left Side							

IV. Rappeller Training Record – Mock-Ups

<p>If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box. If no boxes are marked unsatisfactory, place an "x" in the no errors box.</p>													<p>Minimum Requirements</p> <ol style="list-style-type: none"> 1. Perform helicopter mock-up rappels and re-entry procedures as initiated by the spotter, until proficiency is demonstrated from all seating positions 2. An error free re-entry is counted toward the total number of successful mock-ups. <p>*The minimum number could be as little as four successful mock-ups</p>			
Rappel #	Equipment Care	Buddy Check	Spotter Check	Inspect Rigging	Seatbelt	Rappeller Tether	Response to Spotter Signals	Rig Descender	Transition to Skid	Clear Rope	Remove Rappeller Tether	Exit Off Skid	No Errors *	Comments		
1																
2																
3																
4																
5																
6																
7																
8																
Error Free Cycle Completed							<input type="checkbox"/> Inside Right <input type="checkbox"/> Inside Left <input type="checkbox"/> Outside Right <input type="checkbox"/> Outside Left							Error Free Re-Entry	<input type="checkbox"/> Right Side <input type="checkbox"/> Left Side	

Form C-6.2 Annual Spotter Training Certification Record

Name: _____

Year: _____

Crew: _____

Ground Simulator			
Check Spotter Initials	Pass	Fail	Comments
Elevated Simulator			
Check Spotter Initials	Pass	Fail	Comments
Mock-Ups			
Check Spotter Initials	Pass	Fail	Comments
Live Helicopter Rappels			
Check Spotter Initials	Pass	Fail	Comments
Final Check Spotter's Verification			
Check Spotter's Printed Name	Check Spotter's Signature	Date	

II. Spotter Training Record – Elevated Simulator

Spot	Tower Rigging	Rappeller Equipment Check	Boarding Sequence	Rappel Anchor and Equipment Check	Pre Lift-Off Procedures	in-Flight Procedures	Hand Signals, Exit Procedures, and Sequence	Communications with Pilot	Emergency Procedures (check if completed)	ETO Sequence	No Errors *	
												<p>Minimum Requirements 1. Demonstrate proficiency deploying Rappellers</p>
1												Comments
2												
3												
4												
5												
6												
7												
8												

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box. If no boxes are marked unsatisfactory, place an "x" in the no errors box.

**Form C-9 – Qualification Record – Helicopter Rappel Spotter
Initial Training**

Qualification Record

(N9046)

Assigned to:

Trainee's Name

Duty Station

Phone Number

Initiated by:

Official's Name & Title

Duty Station

Phone Number

Helicopter Rappel Check Spotter or Agency Equivalent

Date

I. Instructions for Completing Qualification Records

Each requirement or task for each qualification record shall be signed and dated by the evaluating spotter. Comments should be included in the space provided to ensure appropriate documentation of performance and to provide feedback to trainees. Each requirement of the Spotter Trainee Qualification Record should only be signed off once the trainee demonstrates adequate knowledge and understanding of the standards or receives the appropriate training. All training must be supervised by a qualified spotter.

The evaluating spotter should also indicate under what performance code the spotter trainee completed the task. Task can be completed in a variety of situations per the following requirements.

T=Performed during training, simulator, or mock-up operations

P=Performed during training, proficiency or project operations with helicopter

W=Performed during wildfire or incident operations with helicopter

Tasks do not need to be completed in sequential order but must be completed to the indicated standard.

Prior to spotting live loads of rappellers, a spotter trainee must complete a minimum of 12 loads from the high tower and 12 mock-ups, both with emergency procedures. The last 4 mockups need to be done without procedural error. One live ETO from the helicopter in open terrain must be completed before spotting in typical terrain.

All tasks 1 thru 5 are a minimum and must be completed prior to a final check ride.

The spotter trainee should be evaluated on multiple occasions and by more than one evaluator. The number of evaluations of each task is not limited to the number of signature lines provided within the evaluator/date column.

Once the spotter trainee has completed all tasks associated with the Spotter Training Handbook and meets the additional requirements of a fully-qualified helicopter rappel spotter, the trainee can be evaluated for full certification by a qualified check spotter.

A. Prior Spotter Re-Certification

If a spotter has lost their annual certification for a time period of two (2) operational seasons (skipped two seasons of certification), the individual shall complete rappel spotter annual certification requirements (see NROG Chapter 3) and will operate under supervision of a qualified spotter for a time period determined by a check spotter. A check spotter may use past performance and experience as a means to determine an acceptable time period.

B. Check Ride

After performing under supervision for the prescribed time period, a formal check ride will be conducted utilizing the Spotter Training Handbook Final Sign-Off Sheet. It is recommended that the check ride occur on an operational rappel. If the individual fails the check ride, he/she will be required to begin spotter training as an initial spotter candidate.

C. Previous Qualification Expiration

If a previously qualified spotter has not been certified in the three (3) previous operational seasons, the individual will begin spotter training as a new spotter candidate in accordance with the NROG, Chapter 3.

Spotters must have documentation on all past qualifications. Inability to produce this documentation will result in starting over as a spotter trainee.

D. Spotter Trainee Re-Certification

Spotter trainees must have documentation on the completion of tasks. Inability to produce this documentation will result in starting over as a spotter trainee. If no documentation is available, a qualified check spotter will evaluate the spotter trainee and make a determination as to what tasks the trainee can show completed.

E. Annual Certification

Spotter trainees that are operationally spotting need to meet all RT requirement as a rappeller and spotter. Three live spots in typical terrain with a qualified spotter and one with a check spotter are required.

F. Helicopter Rappel Spotter

Upon finalization of the Spotter Qualification Record and successful completion of the Final Evaluation, the individual will be recommended for certification by a check spotter as a HERS to the local unit certifying official. This is a fully-certified spotter qualification without limitation.

G. Re-Evaluation

Any task performed in the Final Evaluation rated as **Fail** shall require a period of further training followed by a re-evaluation. Task marked as fail shall be documented in the notes section with additional training requirements. Trainee will be re-evaluated on all demonstrated competencies not just those marked as fail. Once all tasks have been rated as **Pass**, the trainee may then be recommended for full qualification.

II. Helicopter Rappel Spotter Prerequisites

1. Position: Helicopter Rappel Spotter Trainee

Pre-Requisites	Completion Date
One Year Helicopter Rappelling	
Completion of S-372	
Qualified as a HMGB	
Completion of 20 Live Helicopter Rappels with 4 being operational	

Recommended Training	Completion Date
M-410 or equivalent	
COR t	
CRM	
Risk Awareness (A-205)	

III. Qualification Record Tasks

Task one (1) thru five (5) will be conducted under the supervision of a qualified helicopter rappel spotter. Elevated simulator and mockups must be complete prior to live spotting of rappellers. All tasks must be complete prior to a check ride, but do not have to be completed in order.

Task 1	Evaluator /Date	Comments
Elevated Simulator Code: T		
Cabin configuration		
Proper equipment checks		
Verbalization with pilot/trainer (emergency procedures)		
Deploy rappellers using proper hand signals/procedures		
Emergency procedures		
Cargo configuration		
Cargo equipment orientation		
Cargo equipment checks		
Rigging and deploying cargo		
Complete twelve (12) rappel cycles from elevated simulator, four (4) without procedural error, and one (1) combined load with cargo.		

Task 2	Evaluator /Date	Comments
Mock-up Rappellers and Cargo Code: T/P		
Proper briefing crew/pilot		
Proper configuration of cargo		
Proper checks on cargo.		
Proper rappel configuration		
Re-configure helicopter for multiple sticks of rappellers (split load)		
Proper verbalization		
Proper signals		
Emergency procedures Minimum of 4		
Complete minimum of (12) mockups, last (4) without procedural error.		

Task 3	Evaluator /Date	Comments (Make sure to enter spot on tracking sheet)
Live spotting of cargo Code: P/W		
Proper briefing crew/pilot		
Proper configuration		
Proper equipment checks		
Proper verbalization		
Ensure OGE Power Check is completed		
Select adequate cargo site		
Maintain helicopter and rotor clearance throughout cargo letdown sequence		
Maintain visual on cargo		
Maintain focus and control of mission		
Complete a minimum of (4) cycles without procedural error at low, medium and high heights – (4) in typical terrains for a total of (8).		

The items in this task can be completed concurrently with Task 4.

Task 4	Evaluator /Date	Comments <i>(Make sure to enter spot on tracking sheet)</i>
Live spotting of rappellers Code: P/W		
Proper configuration		
Proper briefing crew/pilot		
Proper equipment checks		
Proper verbalization		
Proper hand signals		
Ensure OGE Power Check completed		
Select rappel site and emergency site.		
Select cargo site		
Maintain helicopter and rotor clearance throughout rappel/cargo sequence		
Maintain visual on ropes, rappellers and cargo		
Reconfigure helicopter in flight between deliveries of multiple sticks of rappellers (split load)		
Perform live ETO prior to spotting in typical terrain		
Maintain focus and control of mission		
Trainee must complete a minimum of 20 spots, 10 without procedural error, 15 in typical terrain, 6 with cargo, and 4 operational. All must be complete prior to a check ride.		
Prior to operational spotting, trainee must receive concurrence from base manager and a check spotter.		

Task 5	Evaluator /Date	Comments
Communications, Size Up, Risk Management Code: W (Fire/Incident)		
Flight follow with appropriate authorities		
Maintain flight navigation		
Establish communications and coordinate with IA resources		
Identify flight hazards		
Provide fire size-up to appropriate authority		
Identify escape routes and safety zones		
Identify rappel or landing site and alternate sites		
Assess helicopter performance capabilities		
Establish communications with rappellers and provide further LCES Information Confirm rappellers have communications with dispatch		

Once spotter trainee has completed tasks 1-5, demonstrating understanding and competence in all aspects of elevated platform, mock-up, cargo delivery, emergency procedures and rappeller delivery, then supervisor may contact a check spotter for a final check ride.

IV. Documentation Review

Review of

Spotter Records:

	Yes	No
1. Spotter Trainee Qualification Records complete	_____	_____
2. Qualified as a HMGB	_____	_____
3. Qualified as an ICT4	_____	_____
4. Completion of live ETO	_____	_____
5. Completion of split load	_____	_____
6. Completion of four (4) operational spots.	_____	_____

V. Demonstrated Competency

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

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 the spotter trainee has received corrective training from a qualified rappel spotter.

A. Mock-Ups

	Helicopter Mock Ups	Pass	Fail
1	Brief pilot and rappellers in helicopter mock-up operations.		
2	Properly configure helicopter, per requirements, with rappel and cargo equipment.		
3	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.		
4	Exhibit comprehensive knowledge of possible emergency situations and demonstrate appropriate response and action to emergency procedures.		
5	Exhibit proper cargo deployment techniques and proficiency from grounded helicopter using proper verbiage with pilot.		
6	Demonstrate command of all aspects of the rappel and cargo operation, making prompt decisions and giving appropriate directions as needed.		
7	Provide adequate and accurate feedback to rappellers and pilot post mock-up sequence.		

B. Helicopter Spotting

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/air resources (if present).		
5	Perform proper high and low-level reconnaissance of rappel area. Assure helicopter capabilities and limitations under given altitude, temperature, weather condition and payload.		
6	Identify emergency site considering landing site conditions, distance from incident, fire behavior, and hazards		
7	Select primary and alternate rappel sites considering terrain, obstacles, winds, fire behavior and hazards.		
8	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.		
9	Demonstrate proper cargo configuration and deployment procedures.		
10	During rappel and cargo deployment, keep pilot/helicopter over rappel site with minimal movement.		
11	Deliver rappellers and cargo within +/- 10 feet from target, clear of trees and obstacles.		
12	Demonstrate command of all aspects of the rappel and cargo operation, making prompt decisions and giving appropriate directions as needed.		
13	Conduct post-rappel debriefing with crew and pilot emphasizing planned events, actual events, and events that need to be reinforce or improved.		
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/air resources (if present).		

5	Perform proper high and low-level reconnaissance of rappel area. Assure helicopter capabilities and limitations under given altitude, temperature, weather condition and payload.		
6	Identify emergency site considering landing site conditions, distance from incident, fire behavior, and hazards		
7	Select primary and alternate rappel sites considering terrain, obstacles, winds, fire behavior and hazards.		
8	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.		
9	Demonstrate proper cargo configuration and deployment procedures.		
10	During rappel and cargo deployment, keep pilot/helicopter over rappel site with minimal movement.		
11	Deliver rappellers and cargo within +/- 10 feet from target, clear of trees and obstacles.		
12	Demonstrate command of all aspects of the rappel and cargo operation, making prompt decisions and giving appropriate directions as needed.		
13	Conduct post-rappel debriefing with crew and pilot emphasizing planned events, actual events, and events that need to be reinforce or improved.		

VI. Notes:

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

Yes _____ No _____

Once the spotter trainee has completed all tasks associated with the Spotter Training Handbook and meets the additional requirements of a fully qualified helicopter rappel spotter, the trainee can be evaluated for full certification by a qualified check spotter.

VIII. 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) mock-up cycles with emergency procedures and cargo, and three (3) live cycles of rappels in typical terrain, one (1) of which will be a split load. Evaluation may occur in simulated or incident operations.

IX. Check Ride 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/air resources (if present.)		
5	Perform proper high and low-level reconnaissance of rappel area. Assure helicopter capabilities and limitations under given altitude, temperature, weather condition and payload.		
6	Identify emergency site considering landing site conditions, distance from incident, fire behavior, and hazards		
7	Select primary and alternate rappel sites considering terrain, obstacles, winds, fire behavior and hazards.		
8	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.		
9	Demonstrate proper cargo configuration and deployment procedures.		
10	During rappel and cargo deployment, keep pilot/helicopter over rappel site with <u>minimal</u> movement.		
11	Deliver rappellers and cargo within +/- 10 feet from target, clear of trees and obstacles.		
12	Demonstrate command of all aspects of the rappel and cargo operation, making prompt decisions and giving appropriate directions as needed.		
13	Conduct post rappel debriefing with crew and pilot emphasizing planned events, actual events, and events that need to be reinforced or improved.		

Recommendation:

Recommended by rappel check spotter

Date

Reviewed by regional HOS or agency equivalent

Date

Certified by certifying official or agency equivalent

Date

Form C-10 – Rappel Program Proposal Form



Date:

FROM:

TO:

RE:

KEY POINTS:

RTS Comments: Support Do Not Support

ROS Comments: Support Do Not Support

PROGRAM PRIORITY LEVEL

- High (Rappel program will shut down if not acted on)
- Medium (Could affect rappel operation in the near future)
- Low (It would benefit the rappel program)

NRWT: **Approved** **Denied** **Need Additional Information**

Tracking Number:

NRWT Comments and NROG Reference:

/s/

National Rappel Specialist – NRWT Chair

Form C-11 – Rappel Tower Annual Condition Assessment Checklist

(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 it is 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 gratings properly installed with adequate attachment to supporting framework?			Any loose 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 protection 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 check it 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 gratings properly fastened to supporting framework?			Any loose grating must be secured to the supporting framework before the tower/simulator 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			This can be done by tapping on the bolts with a carabineer and if they are loose, they will rattle. Or check it 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			All plates must be checked each year before the tower/simulator 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.

Form C-12 – Rappel Tower Daily Pre-Use Condition Assessment Checklist

(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
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 it is 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 it 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 gratings properly attached to supporting			Any lose grating must be secured to the supporting framework before the tower can be used.
Has 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 loose 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 check it 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 been inspected for signs of distortion?			The plates may not be used if they show 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.