

1 **Appendix F – Example Forms**

2 On the following pages of this appendix are forms that may be used for rappel program documentation
3 purposes. Equipment records and Rappeller and Spotter Unit Logs must be documented in either the
4 hard copy form or in an electronic equivalent.

5 These forms will allow individual programs to organize and document the histories of equipment and
6 training. They were designed to record pertinent information that has been recommended or required
7 by this Guide

Form F-6 – Rappeller Training Record – Initial Rappeller Training

Rappeller Training Record – Initial Rappeller Training				Page 1
Name:		Location		Date
1. Rappel Equipment Orientation and Use <i>The trainee will demonstrate proper use and care of equipment.</i>				
<i>Task:</i>	<i>Pass</i>	<i>Fail</i>	<i>Comments:</i>	
1	Helmet			
2	Eye Protection			
3	Fire Resistant Clothing			
4	Boots			
5	Gloves			
6	BD Bag			
7	Harness			
8	Knife			
9	Descent Device			
10	Rope			
11	Carabiner			
12	Snub Strap			
13	Gunner Strap			
14	Attentiveness to spotter			
<i>The trainee has demonstrated the proper use and care of rappel equipment. The trainee is ready to progress to Buddy Checks.</i>				
Instructor Signature		Instructor (print name)		Date

Rappeller Training Record – Initial Rappeller Training				Page 2	
Name:		Location		Date	
2. Buddy Checks <i>The trainee will demonstrate proper donning of rappel equipment and proper Buddy Check.</i>					
Task:		Pass	Fail	Comments:	
				Ensure trainee checks <u>tactilely</u> where appropriate (visor/mic boom/rappel gloves/harness/hardware/BD bag/knife).	
1	Flight Helmet				
2	Eye Protection				
3	Nomex				
4	Rappel Gloves				
5	Harness				
6	BD Bag				
7	Leg Straps				
8	Knife				
9	Nomex & Boots				
10	Back side (helmet/harness/Nomex)				
11	Thumbs-up (“I agree, I am OK”)				
12	Rope/Device (aircraft specific)				
<i>The trainee has demonstrated proper donning of rappel equipment and Buddy Checks. The trainee is ready to progress to Ground Training.</i>					
Instructor Signature			Instructor (Print Name)		Date

Rappeller Training Record – Initial Rappeller Training				Page 3
Name:		Location		Date
3. Ground Training <i>The trainee will demonstrate a basic relationship between rappel equipment, and proficiency in handling the descent device and rope and with lock off procedures.</i>				
Task:		Pass	Fail	Comments:
1	Equipment Inspection			
2	Equipment Care			
3	Identify Descent Device Parts			
4	Rigging of Descent Device			
5	Descent Device Orientation			
6	Hook-up			
7	Lock-Off			
8	Smooth Unlock			
9	Proper Hand Placement			
10	Head Position/ Visual			
11	Braking			
12	Smooth Un-hook			
13	Verbalization			
14	Attentiveness to spotter			
<i>The trainee has demonstrated a basic relationship between rappel equipment, and proficiency in handling the descent device and rope and with lock off procedures. Trainee has demonstrated Emergency Procedures The trainee is ready to progress to Tower Training.</i>				
Instructor Signature		Instructor (print name)		Date

Rappeller Training Record – Initial Rappeller Training

Name: _____

Location _____

Date _____

4. Tower Training

The trainee will demonstrate proficiency in exit from simulator. Demonstrate controlled descent. Perform 3 weighted re-entries. Perform 3 weighted knots. Perform 3 weighted Emergency Tie- Offs. Trainee will complete a minimum of 20 rappels between the High and Low Tower. A system of penalties is incorporated into rappel training starting at the tower.

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.

Check when completed

Comments:

Rappel #	Equipment Care	Buddy Check	Spotter Check	Rigging inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient Descent Device	Hook up / Lock-off	Transition to Skid	Clearing of Rope	Unlock	Exit Off Skid	Situational Awareness	Speed Control	Braking	Landing	Clearing of LZ	Check when completed				No Errors *	Comments:
																		Weighted	Reentry	Knot	Tie-Off		
1																						<ul style="list-style-type: none"> If no boxes are marked unsatisfactory, place an "x" in the no errors box. Unsatisfactory items must be addressed by a spotter. Penalties (major/minor) will not be applied until after the 5th tower rappel. 3 minors constitute a major. Items with grey high-light are specific to high tower only. 	
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Minors: 1 2 3 4 5 6 7 8 9

Majors: 1 2 3

The trainee has demonstrated proficiency in exiting from the simulator and controlled descent. Performed 3 weighted reentries, 3 weighted knots and 3 weighted Emergency Tie Offs. Completed a minimum of 20 rappels between the High and Low Towers. The trainee is ready to progress to Helicopter mock-ups.

Instructor Signature _____

Instructor (print name) _____

Date _____

Rappeller Training Record – Initial Rappeller Training

Name: _____

Location _____

Date _____

4. Tower Training (cont.)

The trainee will demonstrate proficiency in exit from simulator. Demonstrate controlled descent. Perform 3 weighted re-entries. Perform 3 weighted knots. Perform 3 weighted Emergency Tie- Offs. Trainee will complete a minimum of 20 rappels between the High and Low Tower. A system of penalties is incorporated into rappel training starting at the tower.

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.

Check when completed

Comments:

Rappel #	Equipment Care	Buddy Check	Spotter Check	Rigging inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient Descent Device	Hook up / Lock-off	Transition to Skid	Clearing of Rope	Unlock	Exit Off Skid	Situational Awareness	Speed Control	Braking	Landing	Clearing of LZ	Check when completed				No Errors *	Comments:
																		Weighted	Reentry	Knot	Tie-Off		
11																							<ul style="list-style-type: none"> • If no boxes are marked unsatisfactory, place an “x” in the no errors box. Items with grey high-light are specific to high tower only. • Unsatisfactory items must be addressed by a spotter. Penalties (major/minor) will not be applied until after the 5th tower rappel. 3 minors constitute a major. • Items with grey high-light are specific to high tower only.
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Minors: 1 2 3 4 5 6 7 8 9

Majors: 1 2 3

The trainee has demonstrated proficiency in exiting from the simulator and controlled descent. Performed 3 weighted reentries, 3 weighted knots and 3 weighted Emergency Tie Offs. Completed a minimum of 20 rappels between the High and Low Towers. The trainee is ready to progress to Helicopter mock-ups.

Instructor Signature _____

Instructor (print name) _____

Date _____

Rappeller Training Record – Initial Rappeller Training

Name: _____

Location _____

Date _____

4. Tower Training (cont.)

The trainee will demonstrate proficiency in exit from simulator. Demonstrate controlled descent. Perform 3 weighted re-entries. Perform 3 weighted knots. Perform 3 weighted Emergency Tie- Offs. Trainee will complete a minimum of 20 rappels between the High and Low Tower. A system of penalties is incorporated into rappel training starting at the tower.

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.

Check when completed

Comments:

Rappel #	Equipment Care	Buddy Check	Spotter Check	Rigging inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient Descent Device	Hook up / Lock-off	Transition to Skid	Clearing of Rope	Unlock	Exit Off Skid	Situational Awareness	Speed Control	Braking	Landing	Clearing of LZ	Weighted	Reentry	Knot	Tie-Off	No Errors *	
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- If no boxes are marked unsatisfactory, place an “x” in the no errors box. Items with grey high-light are specific to high tower only.
- Unsatisfactory items must be addressed by a spotter. Penalties (major/minor) will not be applied until after the 5th tower rappel. 3 minors constitute a major.
- Items with grey high-light are specific to high tower only.

Minors: 1 2 3 4 5 6 7 8 9

Majors: 1 2 3

The trainee has demonstrated proficiency in exiting from the simulator and controlled descent. Performed 3 weighted reentries, 3 weighted knots and 3 weighted Emergency Tie Offs. Completed a minimum of 20 rappels between the High and Low Towers. The trainee is ready to progress to Helicopter mock-ups.

Instructor Signature _____

Instructor (print name) _____

Date _____

Rappeller Training Record – Initial Rappeller Training

Name:	Location	Date
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5. Mock-Ups

Familiarize the trainee with the procedures in the helicopter to be used. Demonstrate ability to go through mock-up procedures without hesitation and or error. A system of penalties is incorporated into rappel training starting at the tower.

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.

Rappel #	Equipment Care	Buddy Check	Spotter Check	Rigging Inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient descent Device	Hook up / Lock-off	Transition to Skid	Clearing of rope	Unlock	Exit Off Skid	Re-Entry *	No Errors **	Comments
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Minors: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9	Majors: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
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The trainee is familiar with the procedures in the helicopter and demonstrated the ability to go through mock-up procedures without hesitation or error. The trainee is ready to progress to Live Rappels

Instructor Signature	Instructor (print name)	Date
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Form F-7 – Rappeller Training Record – Recertification Training

Rappeller Training Record – Recertification Training																	Page 1								
Name:											Location				Date										
1. Rappeller has completed Equipment and Procedures Review <i>Refer to training elements in the IHRG, Chapter 2 – Annual Certification.</i>											Instructor				Date										
2. Tower Training <i>The rappeller will demonstrate proficiency in exit from simulator. Demonstrate controlled descent. Perform 3 weighted re-entries. Perform 3 weighted knots. Perform 3 weighted Emergency Tie- Offs. Rappeller shall complete tower work as stated in the Interagency Helicopter Rappel Guide, Chapter 2 – Annual Certification (performance based requirements) A system of penalties is incorporated into annual rappel certification starting at the tower.</i>																									
If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.											Check when completed				Comments:										
Rappel #	Equipment Care	Buddy Check	Spotter Check	Rigging inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient Descent Device	Hook up / Lock-off	Transition to Skid	Clearing of Rope	Unlock	Exit Off Skid	Situational Awareness	Speed Control	Braking	Landing	Clearing of LZ	Weighted	Reentry	Knot	Tie-Off	No Errors *	<ul style="list-style-type: none"> If no boxes are marked unsatisfactory, place an "x" in the no errors box. Unsatisfactory items must be addressed by a spotter. Penalties (major/minor) will not be applied until after the 2nd tower rappel. 3 minors constitute a major. 		
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12																									
Minors: 1 2 4 5 6 7 8 9															Majors: 1 2 3										
<i>The rappeller has demonstrated proficiency in exiting from the simulator and controlled descent. Performed 3 weighted reentries, 3 weighted knots and 3 weighted Emergency Tie Offs. The Rappeller is ready to progress to mock-ups.</i>																									
Instructor Signature											Instructor (print name)							Date							

Rappeller Training Record – Recertification Training

Name:	Location	Date
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Refer to training elements in the IHRG, Chapter 2 – Annual Certification

3. Mock-Ups

Familiarize the Rappeller with the procedures in the helicopter to be used. Demonstrate ability to go through mock-up procedures without hesitation and or error. A system of penalties is incorporated into annual rappel certification starting at the tower.

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.

Rappel #	Equipment Care	Buddy Check	Spotter Check	Rigging Inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient descent Device	Hook up / Lock-off	Transition to Skid	Clearing of rope	Unlock	Exit Off Skid	Re-Entry *	No Errors **	Comments
1															<ul style="list-style-type: none"> A Re-entry must be performed from the left and right side of the aircraft. If no boxes are marked unsatisfactory, place an “x” in the no errors box. Unsatisfactory items must be addressed by a spotter. Assessed penalties (major/minor) carry over from the high tower. When a penalty is given by a spotter, mark the appropriate minor/major box below. 3 minors constitute a major
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12															

Minors: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9	Majors: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
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The rappeller is familiar with the procedures in the helicopter to be used. Demonstrated the ability to go through mock-up procedures without hesitation and or error. The rappeller is ready to progress to Live Rappels

Instructor Signature	Instructor (print name)	Date
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4. Live Helicopter Rappel Training

Rappeller will demonstrate the ability to exit hovering helicopter safely and efficiently. When exposed to different rappel problems or terrain, the rappeller is able to complete rappel or corrective procedure without hesitation or error.

All penalties (minor/major) reset for Live Rappels, during live rappels, one major or three minors will be grounds for the rappeller’s immediate removal from training. When a penalty is given by a spotter, mark the appropriate minor/major box below. 3 minors constitute a major.

If there is a deficiency in one of the areas below, it should be marked unsatisfactory (u) in the appropriate box and a comment made.

Rappel #	Indicate below rappel height and terrain.	Equipment Care	Buddy Check	Spotter Check	Rigging Inspection	Seatbelts/ Gunner Strap	Response to Spotter Signals	Orient descent Device	Hook up/ lock-off	Transition to Skid	Clearing of Rope	Unlock	Exit off Skid	Situational Awareness	Speed Control	Braking	Landing	Clearing of LZ	No Error **	Comments
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2																				
3																				
4																				
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6																				
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8																				
9																				
10																				
11																				

Minors: 1 2 3

Majors: 1

Rappeller has demonstrated the ability to exit hovering helicopter safely and efficiently. When exposed to different rappel problems or terrain, the trainee is able to complete rappel or corrective procedure without hesitation or error

Instructor Signature	Instructor (print name)	Date
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Form F-8 – Helicopter Spotter Training Record – Recertification Training

Helicopter Spotter Training Record – Recertification Training		Page 1	
Name	Location	Date	
1. Returning Spotter Task List <i>Spotter must be evaluated by a qualified spotter in each make and model of helicopter that will be utilized as an operating platform. Spotter evaluators must be current in the make and model of helicopter being utilized.</i>			
	<i>Pass</i>	<i>Fail</i>	<i>Comments</i>
1. Meet fitness standards			
2. Attend and / or participate as an instructor at annual helicopter rappel training. This shall include re-qualifying as a rappeller			
3. Attend RT-271 Helicopter Safety Refresher			
4. Demonstrate Knowledge of Rappel Spotter Principals including emergency procedures, mission planning, and hazards.			
5. <i>Complete deployment of three loads of Rappellers with cargo from helicopter to the satisfaction of a qualified spotter with experience in make and model being used. Typical terrain shall be utilized for at least one of the three loads.</i>			
<i>Returning Spotter has met the above standards</i>			
Instructor Signature	Instructor (print name)		Date

Helicopter Spotter Training Record – Recertification Training

Name	Location	Date
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2. High Tower Training for Returning Spotter

Demonstrate proficiency in simulator.

Spot #	Tower Rigging	Rappeller equipment check	Seating arrangement for Rappellers and spotter	Rappel anchor, and equipment check	Pre Lift off Procedures	In-Flight Procedures	Hand signals, exit procedures, sequence	Emergency procedures	ETO Sequence		Comments:
1											
2											
3											
4											
5											
6											
7											
8											

Returning Spotter has demonstrated proficiency in spotting from the simulator. The returning Spotter is ready to progress to mockups.

Instructor Signature	Instructor (print name)	Date
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Helicopter Spotter Training Record – Recertification Training

Name	Location	Date
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3. Mock-Ups for Returning Spotter

Re-Familiarize the Returning Spotter with the procedures in the helicopter to be used. Demonstrate ability to go through mock-up procedures without hesitation or error.

Mock- up #	Helicopter Rigging	Rappeller equipment check	Boarding sequence	Rappel anchor, and equipment check	Pre Lift off Procedures	In Flight Procedures	Hand signals, exit procedures, sequence	Cargo rigging and deployment	Emergency procedures	Communications w/ pilot or instructor	Comments
1											
2											
3											
4											
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6											
7											
8											

Returning Spotter is familiarized with the procedures in the helicopter to be used. Demonstrated ability to go through mock-up procedures without hesitation and or error. The Returning Spotter is ready to progress to live rappels.

Instructor Signature	Instructor (print name)	Date
Instructor Signature	Instructor (print name)	Date
Instructor Signature	Instructor (print name)	Date

Comments

Helicopter Spotter Training Record – Recertification Training

Name	Location	Date
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4. Live Helicopter Rappels for Returning Spotters

Returning Spotter will complete 3 rappels, at least 1 with cargo, without procedural error. At least one of the rappels will be in typical terrain.

Rappel #	Briefing w/ Pilot mission planning	Review Load calculations to	Prepare helicopter for mission	Helicopter Rigging	Rappeller equipment check	Boarding sequence	Rappel anchor, and equipment check	Pre Lift off Procedures	In Flight Procedures	Hand signals, exit procedures, sequence	Cargo rigging and deployment	Communications w/ pilot	Comments
1													
2													
3													
4													
5													
6													
7													
8													

Returning Spotter is familiarized with the procedures in the helicopter to be used. Demonstrated ability to go through mock-up procedures without hesitation and or error. The Returning Spotter is ready to progress to live rappels.

Instructor Signature	Instructor (print name)	Date
Instructor Signature	Instructor (print name)	Date
Instructor Signature	Instructor (print name)	Date

Comments

**Form F-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

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.

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, and 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.

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.

Spotter Re-Certification

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

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.

Direct Supervision

Direct supervision is defined as a qualified spotter presence onboard the helicopter during the rappel operation. The spotter may be a rappeller if the trainee has shown competency as a spotter trainee.

Indirect Supervision

Indirect supervision is defined as a qualified Helicopter Rappel Spotter (HERS) at the base of operation for the departure and return of the helicopter, not onboard the helicopter.

1 **Helicopter Rappel Spotter**

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

5 **Re-Evaluation**

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

11 **POSITION: HELICOPTER RAPPEL SPOTTER TRAINEE**

Pre-Requisites	Completion Date
One Year Helicopter Rappelling	
Completion of S-372	
Initiated HMGB Task book	
Completion of 20 Live Helicopter Rappels	
IS-700	

Recommended Training	Completion Date
Basic Supervision for First Line Supervisors	
M-410 or equivalent	
COR Level 1	
CRM	
Risk Awareness (A-205)	
Ride along on rappel and/or cargo missions	

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2
3

QUALIFICATION RECORD

Task one (1) thru six (6) will be conducted under the direct supervision of a qualified Helicopter Rappel Spotter.

Task 1	Evaluator /Date	Comments
Ground School Code: T		
Lead and assist spotter during instructional phase of rappel training as per rappel guide		

Task 2	Evaluator /Date	Comments
Tower/Simulator Code: T		
Give Tower and simulator briefing		
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 20 rappel cycles from the high tower, five (5) consecutive loads without procedural error with cargo		

Task 3	Evaluator /Date	Comments
Communications, Size Up, Risk Management, with direct Supervision 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 provides further LCES Information		

Task 4	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		
Proper verbalization		
Proper signals		
Emergency Procedures		
Complete minimum of eight (8) cycles without procedural error		

Task 5	Evaluator /Date	Comments Make sure to enter Spot-on Tracking Sheet
Live spotting of cargo under direct supervision of a rappel spotter 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 ten (10) cycles without procedural error at low, medium and high heights – five (5) in typical terrains		

- 1 The items in this task can be completed concurrently with Task 6.

Task 6	Evaluator /Date	Comments <i>(Make sure to enter spot on Tracking Sheet)</i>
Live spotting of rappellers under direct supervision of a rappel spotter Code: P/W		
Proper configuration		
Proper briefing crew/pilot		
Proper equipment checks		
Proper verbalization		
Proper hand signals		
Ensure OGE Power Check completed		
Select adequate rappel/cargo and alternative site		
Maintain helicopter and rotor clearance throughout rappel/cargo sequence		
Maintain visual on ropes, rappellers, and cargo		
Re-configure helicopter in flight between deliveries of multiple sticks of rappellers		
Maintain focus and control of mission		
Complete a minimum of ten (10) live cycles without procedural error – five (5) typical terrain, three (3) with cargo, and one (1) emergency tie off		

1 Once spotter trainee has completed Tasks 1-6, demonstrating understanding and competence
2 in all aspects of tower, mock-up, cargo delivery, and rappeller delivery procedures, supervisor
3 and check spotter shall authorize trainee to conduct live spotting of cargo and rappellers under
4 indirect supervision.

5 Spotting may occur during proficiency and fire/incident operations.

6 Authorization to spot under indirect supervision is conditional upon certification as a Helicopter
7 Manager and ICT4 and completion of the documentation review and Demonstrated
8 Competency under the evaluation of a Check Spotter.

9 **DOCUMENTATION REVIEW**

10 Review of Spotter Records:

	Yes	No
11 1. Spotter Trainee Qualification Records complete	_____	_____
12 2. Qualified as Helicopter Manager	_____	_____
13 3. Qualified as a ICT4	_____	_____
14 4. Completion of four (4) operational rappels.	_____	_____

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

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Demonstrated Competency

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 Mock Ups	Pass	Fail
1	Brief pilot and rappellers of 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, 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.		
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.		

	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 <u>minimal</u> 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.		

1 Notes: _____
2 _____
3 _____
4 _____

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

Yes _____ No _____

1

AUTHORIZATION TO SPOT UNDER INDIRECT SUPERVISION

2 Date Certified as Helicopter Manager: _____

3 Date Certified as ICT4: _____

4 Supervisor: _____ Date: _____

5 Check Spotter: _____ Date: _____

Task 7	Evaluator /Date	Comments <i>(Make sure to enter spot on Tracking Sheet)</i>
Live spotting of rappellers and cargo under indirect supervision by a Rappel Spotter. Code: P/W		
Proper configuration		
Proper briefing crew/pilot		
Proper equipment checks		
Proper verbalization		
Proper hand signals		
Ensure OGE Power Check completed		
Select adequate rappel/cargo and alternative site		
Maintain helicopter and rotor clearance throughout rappel/cargo sequence		
Maintain visual on ropes, rappellers, and cargo		
Re-configure helicopter in flight between deliveries of multiple sticks of rappellers		
Maintain focus and control of mission		
Complete a minimum of 10 live cycles without procedural error – five (5) typical terrain, three (3) with cargo, one (1) emergency tie off		

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

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										
12										
13										
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30										
31										
32										

1 **HERS Final Evaluation**

2 _____
HERS (T) Name Duty Station Phone Number

3 _____
Name of Check Spotter Duty Station Phone Number

4 _____

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

7 The final evaluation will include a minimum of three (3) cycles with cargo at low, medium and high
8 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 <u>minimal</u> 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.		

1 **Notes:** _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____

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

14 Yes _____ No _____

15 **Recommendation:** _____
16 _____
17 _____
18 _____
19 _____
20 _____
21 _____

22 _____ Date

23 _____ Date

24 _____ Date

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1 **Form F-10 – Equipment and Procedure Proposal Form**

2 **EQUIPMENT AND PROCEDURES PROPOSAL**

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

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

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

7 **PROCEDURES** *(Describe procedure propose or explain how new equipment may change or add*
8 *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 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 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 loose 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.

- 1 If any of the questions have been answered with a **"No"**, the problem **must be fixed**
- 2 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 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 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 signs of distress until they have been inspected by a qualified engineer.
Other Items Noted:			

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