

Appendix K – Acronyms and Definitions

Acronyms

AGL	Above Ground Level
ALSE	Aviation Life Support Equipment
ANSI	American National Standards Institute
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CG	Center of Gravity
CRM	Crew Resource Management
DOI	Department of the Interior
FAA	Federal Aviation Administration
FSH	Forest Service Hand Book
FSM	Forest Service Manual
ETO	Emergency Tie Off
GAR	Green-Amber-Red Risk Assessment
HCCS	Helicopter Cargo Letdown Check Spotter
HCLS	Helicopter Cargo Letdown Spotter
HERS	Helicopter Rappel Spotter
IA	Initial Attack
IHOG	Interagency Helicopter Operations Guide
IHOPS	Interagency Helicopter Operations Sub-committee
IHPPTS	Interagency Helicopter Pilot Practical Test Standards

IHRG	Interagency Helicopter Rappel Guide
IHRU	Interagency Helicopter Rappel Unit
MTDC	Missoula Technology and Development Center
NFPA	National Fire Protection Association
NPS	National Park Service
NROG	National Rappel Operations Guide
OAS	Office of Aviation Services
OSHA	Occupational Safety and Health Administration
PPE	Personal Protective Equipment
SDTDC	San Dimas Technology and Development Center
SPH	Sound Protection Helmet (or Flight Helmet)
STC	Supplemental Type Certificate
USDA	United States Department of Agriculture
USDOJ	United States Department of Interior
USFS	United States Forest Service
W&B	Weight and Balance

1 Definitions

2 **Anchor:** Means of attaching the rope to an object. For helicopter rappelling, the anchor is an
3 approved “fail-safe” attachment point for the rappel ropes, tethers, or other devices to the
4 helicopter.

5 **Bight:** A V-shaped bend in a rope that comes back on itself, but does not cross.

6 **Booster Rappeller:** A qualified rappeller from another exclusive-use rappel base. Booster
7 rappellers are used to augment the rappel crew capability at the host base when there is
8 demonstrated need, or anticipated need.

9 **Challenge & Response:** One party presents a question (challenge) and another party must
10 provide a valid answer (response) to validate the action.

11 **Descent Device or Descender:** A metal device through which the rope passes; designed to create
12 friction, as needed, during a rappel. Tension from the brake hand provides the device with
13 friction to control the rate of descent or stop.

14 **Direct Supervision:** Direct supervision is defined as qualified spotter presence on board the
15 helicopter during the rappel operation. The spotter may be a rappeller if the trainee has shown
16 competency as a spotter trainee.

17 **Feed or Feeding:** The act of pushing or sliding a rope through a descent device.

18 **Figure 8 Cargo Delivery Device:** A device for inducing friction to a rope or letdown line. The
19 shape of the device resembles the numeral “eight”. It is available with or without ears. Another
20 name includes Rescue 8.

21 **Fire Season:** A season is continuous employment in a primary wildland fire position for a period
22 of 90 days or more.

23 **Glaze or Glazing:** Heat generated during rapid rappels can overheat an area on a rope or
24 webbing to the point of momentarily melting the nylon sheath fibers, which cool into a hard
25 crystalline coating. When glazing occurs, it should be considered for rope or webbing
26 retirement.

27 **Gunner Strap:** A restraint that keeps the rappeller tethered to the helicopter during the period
28 between removing their seat belt and hooking up to the descent device.

29 **Lock-Off:** A technique intended to temporarily attain a stationary position on the rope.

30 **Non-Operational Rappel:** Any rappel performed in a controlled environment where the purpose
31 of the rappel is training or proficiency, and not operational in nature.

32 **Indirect Supervision:** Indirect supervision is defined as a qualified HERS at the base of
33 operation for the departure and return of the helicopter and not on board the helicopter.

34 **Internal Abrasion:** Damage caused by internal friction from dirt and grit particles trapped
35 between fibers inside a rope. Use of a rope filled with these particles can severely damage the
36 rope from the inside out.

37 **Operational Rappel:** Any rappel performed for the purpose of accomplishing a task once the
38 rappeller is on the ground. This may include rappelling fire fighters, search and rescue, or law
39 enforcement personnel to perform a specific task.

1 **Rappeller:** A person trained and certified to rappel from a helicopter in accordance with agency
2 specific policy and direction contained in the IHRG.

3 **Rappel Check Spotter:** A qualified rappel spotter that has a least three (3) seasons experience as
4 a rappel spotter and has been designated by an agency to certify rappel spotters.

5 **Rappel Configured:** Spotter and rappeller(s) have donned rappel and spotter gear. All personnel
6 have performed necessary equipment and procedure checks and are in approved seating
7 positions. Helicopter is configured with ropes and rigged descent devices. Cargo is packaged
8 and secured with adequate letdown gear on board and in position for cargo deployment. Bucket,
9 longline, remote hook, and additional fire fighting tools may or may not be on board, as
10 environmental conditions, mission requirements, and helicopter performance dictate.

11 **Rappel Equipped:** Spotter and rappellers on board with all necessary equipment for initial attack
12 and rappel operations. Essential cargo (bucket, longline, remote hook, additional fire fighting
13 tools) will be on board as mission planning dictates.

14 **Rappel Height(s):** Rappels are generally categorized into three heights as follows:

15 **Low** = below 75 feet AGL **Medium** = 75 to 150 feet AGL **High** = above 150 feet AGL

16 **Rappel Spotter:** A person trained and certified, in accordance with agency specific policy and
17 direction contained in the IHRG. They are responsible for directing and managing rappel
18 operations, providing instruction for initial rappeller candidates, spotter trainees, certifying
19 rappellers and ensuring compliance with the IHRG.

20 **Rappel Stick:** Two rappellers deployed simultaneously from a helicopter.

21 **Trainee:** A designation attached to any position that denotes a person who successfully meets the
22 training requirements, but has not been certified to perform operational missions in that capacity
23 without direct supervision of a qualified rappel spotter.