# International Tree Climbing Championship



#### **HOW TO USE THIS RULE BOOK**

It is the responsibility of the judges, officials, technicians, and competitors to review the rules in their entirety before the start of the competition. The rules are presented from general to specific; that is, rules that apply to the entire competition are at the beginning. Rules for individual events then follow.

Each section is identified by a unique number to help you navigate the Rule Book. For example, all rules associated with the Work Climb begin with the number 3. A summary of the event can be found at the beginning of each event section. The summary is not a rule but an overview of the event. The actual rules for each event follow the summary. At the end of each section is a list of mandatory and discretionary penalties and reasons for disqualifications, which can also be found in each Quick Reference Guide (Appendix 8).

Rules that have been added or changed since the last revision are highlighted in bold. The rules for the Footlock Event are online. If you plan to run a Footlock Event or a Head-to-Head Footlock, visit **www.itcc-isa.com/rulesregulations/rules**. The World-Record Attempt form is still available in the Rule Book.

The Rule Book is updated using the feedback from competitors and volunteers throughout the year. Thank you to the 2018 Rules Committee for their time developing this set of rules:

John 'Didj' Coles, Committee Chair Tom Greenwood, ITCC Head Judge Doug Sharp, APTCC Head Judge Rip Tompkins, ETCC Head Judge John Gauthier, NATCC Head Judge Tim Bushnell. Technical Member

This set of rules will be valid until ITCC 2021, for which a new set of rules will be released.

If you have questions or suggestions that you would like sent to the ITCC Rules Committee, would like to volunteer your assistance at ITCC, and/or have an idea for how the event could be improved, e-mail the ISA office at itcc@isa-arbor.com, call +1 (217) 355-9411, or write to ISA, P.O. Box 3129, Champaign, IL 61826-3129, USA.

## International Tree Climbing Championship

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#### ITCC MEN'S HALL OF CHAMPIONS

2017	James Kilpatrick, New Zealand Chapter
2016	James Kilpatrick, New Zealand Chapter
2015	James Earhart, Mid-Atlantic Chapter
2014	Scott Forrest, New Zealand Chapter
2013	Scott Forrest, New Zealand Chapter
2012	Bernd Strasser, Germany Chapter
2011	Scott Forrest, New Zealand Chapter
2010	Mark Chisholm, New Jersey Chapter
2009	Jared Abrojena, Western Chapter
2008	Bernd Strasser, Germany Chapter
2007	Bernd Strasser, Germany Chapter
2006	Bernd Strasser, Germany Chapter
2005	Dan Kraus, Pacific Northwest Chapter
2004	Bernd Strasser, Germany Chapter
2003	Bernd Strasser, Germany Chapter
2002	Bernd Strasser, Germany Chapter
2001	Mark Chisholm, New Jersey Chapter
2000	Bernd Strasser, Germany/Austria Chapter
1999	Bernd Strasser, Germany/Austria Chapter
1998	Michael Cotter, Mid-Atlantic Chapter
1997	Mark Chisholm, New Jersey Chapter
1996	Rip Tompkins, New England Chapter
1995	Ken Palmer, New England Chapter
1994	Jim Harris, Pacific Northwest Chapter
1993	Ken Palmer, New England Chapter
1992	Bob Weber, Penn-Del Chapter
1991	Ken Palmer, New England Chapter
1990	Greg Clemens, Ohio Chapter
1989	Bob Weber, Penn-Del Chapter
1988	No Insurance No Championship

1987 No Insurance, No Championship 1986 Craig Cutler, New Jersey Chapter 1985 Steve Bannan, Penn-Del Chapter 1984 Rick Husband, Texas Chapter 1983 Bob Maltby, New England Chapter 1982 Bob Hunter, Western Chapter 1981 Bob Hunter, Western Chapter 1980 Paul Harlow, New England Chapter 1979 Sam Noonan, Western Chapter 1978 Sam Noonan, Western Chapter 1977 Tom Smith, Western Chapter 1976 Tom Gosnell, Western Chapter ITCC WOMEN'S HALL OF CHAMPIONS 2017 Chrissy Spence, New Zealand Chapter 2016 Chrissy Spence, New Zealand Chapter 2015 Jamilee Kempton, Western Chapter 2014 Josephine Hedger, UK/Ireland Chapter 2013 Nicky Ward-Allen, New Zealand Chapter 2012 Veronika Ericsson, Sweden Chapter 2011 Christina Spence, New Zealand Chapter 2010 Josephine Hedger, UK/Ireland Chapter 2009 Anja Erni, Switzerland 2008 Josephine Hedger, UK/Ireland Chapter 2007 Christina Spence, New Zealand Chapter 2006 Elena O'Neill, New Zealand Chapter 2005 Christina Spence, New Zealand Chapter 2004 Kathy Holzer, Pacific Northwest Chapter 2003 Kiah Martin, Australia Chapter 2002 Wenda Li, Ontario Chapter 2001 Christina Engel, Germany/Austria Chapter

## CURRENT ITCC MEN'S FOOTLOCK WORLD RECORD (15 METERS):

James Kilpatrick, New Zealand Chapter

World-Record Time: 13.65 (Set at 2011 APTCC, Singapore)

## CURRENT ITCC WOMEN'S FOOTLOCK WORLD RECORD (12 METERS):

Nicky Ward-Allen, New Zealand Chapter

World-Record Time: 13.26 (Set at 2010 ITCC, Chicago)

## CURRENT ITCC WOMEN'S FOOTLOCK WORLD RECORD (15 METERS):

Nicky Ward-Allen, New Zealand Chapter

World-Record Time: 19.55 (Set at 2018 New Zealand Chapter/Wellington

Regional TCC)

#### INTRODUCTION

Tree climbing competitions are held in countries around the world. Each chapter or associate organization and each regional event of the International Society of Arboriculture (ISA) is allowed to send one male and one female climber to compete for the title of World Champion at ISA's Annual International Tree Climbing Championship (ITCC). Climbers are selected as a result of their demonstrated exceptional abilities in their chapter championships.

Tree climbing competitions began in 1976, with the first ISA Tree Trimmer's Jamboree in St. Louis, Missouri. The Jamboree was initially established to preserve classic skills so that when it came to a real-life aerial rescue, a climber with nothing more than a rope could save a life.

The competition has grown, its purpose has expanded, and the name has changed to the International Tree Climbing Championship to reflect the global expansion of eligible competitions. Competitions promote safe working practices, demonstrate improvements and innovations in equipment and techniques, and provide industry recognition to the public. They are also an opportunity for climbers to gather and exchange ideas with their professional peers.

The first competition had four events, the Work Climb, Aerial Rescue, Rope Throw, and the Footlock or Body Thrust Speed Climb. The format for the ITCC changed in 1996, introducing five new preliminary events: Work Climb (80 points), Aerial Rescue (50 points), Throwline (30 points), Footlock (20 points) and Speed Climb (20 points), for a total of 200 points. The competitors who accumulate the highest combined point totals in the preliminary events earn the right to move on to the championship round, the Masters' Challenge.

Competitors who advance to the Masters' Challenge start fresh and no preliminary points earned are carried forward. A total of 300 points may be earned in the Masters' Challenge event. The winners, one woman and one man, are named the World Champions, and are also awarded an automatic position in the next year's International Tree Climbing Championship.

This format remained largely unchanged until 2017, when the Ascent Event became an official preliminary event. With ever-evolving equipment and techniques pushing the industry forward, footlock was becoming a thing of the past and so became the Ascent Event, an official preliminary event. The Ascent Event is intended to push climbers to think critically about their systems and to innovate for safer and more efficient climbing systems.

#### 1 COMPETITOR'S RESPONSIBILITIES

#### 1.1 General Requirements

- 1.1.1 All competitors are required to attend all mandatory meetings. Due to special circumstances, exceptions may be made only with the Head Judge's approval. Failure to attend mandatory meetings without prior approval of the Head Judge may result in disqualification from the entire event.
- 1.1.2 The pre-event meetings are conducted to inspect equipment; review rules and regulations; introduce the competitors, judges, and officials; verify registrations and sign a standard insurance waiver; and discuss and answer questions before the event.
- 1.1.3 It is each competitor's responsibility to bring any questions about equipment or rules and regulations to the judges' attention at these meetings.
- 1.1.4 It is each competitor's responsibility to have all new equipment approved for competition by ISA at least three months prior to the event, using the submission form at <a href="www.itcc-isa.com/equipmentapproval">www.itcc-isa.com/equipmentapproval</a>.

  No new equipment will be reviewed the day of the competition.
- 1.1.5 It is each competitor's responsibility to read and understand the rules and conditions of the competition prior to the event. Competitors shall conduct themselves in a professional manner at all times during the competition. Failure to do so may result in immediate disqualification and dismissal from the event.
- 1.1.6 It is each competitor's responsibility to enter the arena with the required equipment stipulated for each event. Once event time has started, no additional equipment can be brought into the arena. Failure to abide by this rule will result in disqualification from that event. (2018)

#### 2 GENERAL RULES AND REGULATIONS

#### 2.1 Eligibility

- 2.1.1 Each ISA chapter, ISA associate organization, and ISA regional event, may send only one male and one female climber to represent the chapter or associate organization at the international competition. There are two exceptions to this rule:
  - a. The previous year's world champions are invited back to defend their titles. The chapters with the current world champions are allowed to send additional climbers to compete as the chapter's representative(s).

- b. ISA may invite additional qualified climbers to compete at the international competition. Climbers shall be the champion or runner-up of a local or regional ISA-sanctioned climbing championship.
- 2.1.2 To be eligible to send competitor(s) to the ITCC or a regional event (ETCC, NATCC, or APTCC), an ISA chapter or ISA associate organization shall:
  - a. Hold a competition consisting of a set of five preliminary events, as outlined in the ITCC Rule Book, to determine finalists who compete in a Masters' Challenge event. The competition champion is the winner of the Masters' Challenge.
  - Adhere to all competition rules as outlined in the ITCC Rule Book as well as all other competition and equipment notifications and requirements.
- 2.1.3 In the event a Tree Climbing Championship (TCC) is impacted by influences outside the control of the organizers, such as inclement severe weather or other circumstances that do not allow for a safe and/or practical way to complete the planned-for Masters' Challenge, the chapter or associate organization should declare a winner using the results of the preliminary events. The winner is the competitor with the highest combined total points from the preliminary events.
- 2.1.4 In the event that there are only one or two competitors in a division (male or female) at a regional, chapter, or associate organization level, the potential climber representative shall be deemed to be eligible to compete at ITCC if the criteria outlined in Appendix 4 are met.
- 2.1.5 All competitors shall be members of ISA prior to the start of the competition. All competitors shall be at least 16 years of age prior to the start of the competition. Competitors who are 16 or 17 years old at the start of the competition shall have legal guardian consent and may have to demonstrate the appropriate skills to compete safely.

#### 2.2 Equipment

2.2.1 All equipment used shall be manufactured to meet or exceed the minimum accepted industry safety standard, unless otherwise specified in this document, and shall reflect industry best practices. Equipment shall be considered appropriate for use in tree climbing. If equipment is not clearly labeled to provide an industry standard mark, it is the user's responsibility to provide written evidence in English, to be retained by the Head Judge, that the equipment is manufactured to meet the accepted industry standard for that piece of equipment and its application.

- 2.2.2 All components used **within any configuration** shall meet the criteria of Rule 2.2.1, and be compatible with one another. **(2018)**
- 2.2.3 It is the responsibility of each competitor, judge, technician, and/or volunteer to ensure that all equipment meets Rule 2.2.1 and is fully functional, clean, and contaminant-free. This includes ensuring that all volunteers' cutting tools have been disinfected before starting work on the ITCC trees.
- 2.2.4 If a competitor has a question about the legality of a climbing technique or system, it is the competitor's responsibility to have that technique, or system approved by the Head Technician during the competitors' meetings the day prior to the event. The Head Technician may consult with the ITCC Chairperson and Head Judge, at which point all three will address the question and make a ruling. Prior to the competition, competitors may also visit the ITCC Rules web site (<a href="www.itcc-isa.com/rulesregulations">www.itcc-isa.com/rulesregulations</a>) for more information about safety warnings and hardware configurations, and to ask questions about the legality or the approval of climbing techniques used in ITCC competitions. Final approval for competitors' climbing techniques will be made at the competition gear inspection.
- 2.2.5 Any equipment that does not meet the ITCC gear inspection standards will be tagged and quarantined prior to the competition and will not be returned until the completion of the event. It is the competitor's responsibility to claim the equipment at the time designated by the ITCC officials.
- 2.2.6 During the competition, if a competitor has a question about equipment or the legality of a climbing technique that cannot be answered by the Event Head Judge, the ITCC Chairperson, Head Judge, and Head Technician will address the question and make a ruling.
- 2.2.7 All personal climbing equipment is subject to reinspection and approval by the judges or technicians before each event. Competitors' equipment shall meet or exceed required standards by the time s/he is scheduled to start an event. Otherwise, the competitor shall forfeit that event. The required equipment for an event is specified in the rules for that event and is listed on the scoresheet. (2018)
- 2.2.8 All rope snaps used in a fall-protection/work-positioning system shall be of the self-closing, self-locking type and shall be manufactured to meet or exceed the minimum accepted industry safety standard.
- 2.2.9 Screw links shall be manufactured to meet or exceed the minimum accepted industry safety standard and be mechanically tightened to ensure that they will not open during use.

- 2.2.10 A carabiner used as part of a climber's primary fall-protection/work-positioning system shall be manufactured to meet or exceed the minimum accepted industry safety standard. It shall be self-closing and double autolocking and require a minimum of two separate operations to prepare the gate to open. Failure to abide by this rule may result in disqualification.
- 2.2.11 Carabiners used as part of a climber's primary fall-protection/work-positioning system shall not be chain-linked to other carabiners or connecting links.
- 2.2.12 No equipment used in a fall-protection/work-positioning system shall incorporate quick-release mechanisms. Where applicable, quick-release mechanisms shall be replaced with a manufacturer-approved bolt and nut assembly.
- 2.2.13 Competitors, judges, technicians, and other approved individuals shall wear approved eye protection at all times while inside the event safety perimeter. Permission may be granted by the Event Head Judge for the climber to stop and briefly remove approved eye protection for cleaning, changing, etc. The event timing will continue and not be stopped. Approved eye protection shall be impact resistant, provide wraparound eye protection, and be manufactured to meet or exceed the minimum accepted industry safety standard.
- 2.2.14 Competitors, judges, technicians, and other approved individuals shall wear appropriate head protection at all times while inside the event safety perimeter. Hard hats and climbing-style helmets shall be manufactured to meet or exceed the minimum accepted industry safety standard and have been approved by the manufacturer for use in that application. Competitors and technicians who are working aloft shall wear climbing-style helmets.
- 2.2.15 Competitors, judges, technicians, and officials shall wear appropriate footwear and clothing during competition. Appropriate footwear is defined as a boot that covers the foot and ankle and that is constructed with a suitable sole and upper portion. The upper portion of the boot should provide protection from penetration. The sole should provide proper traction for work on the ground as well as when working aloft. ITCC-issued clothing shall be worn while participating in the preliminary events, the Head-to-Head Footlock competition, the Masters' Challenge, and at all award ceremonies.
- 2.2.16 All activity aloft (Work Climb, Masters' Challenge, Aerial Rescue, Ascent Event, and Belayed Speed Climb) shall be done with the aid of a work-positioning or fall-protection system. A competitor shall be secured at all times while ascending into the tree, while performing the event task, and until s/he returns to the ground.

- 2.2.17 A suitable fall-protection system requires that the climbing line always be anchored above the climber.
- 2.2.18 When footlocking, a competitor shall not wrap the Prusik cord around his/her arm.
- 2.2.19 Infractions of the work-positioning/fall-protection rule will result in lost points or disqualification at the discretion of the judges. Infractions include failure to manage slack (not having so much slack in the climbing line that the loop of slack hangs below the competitor's knee), or brief instances of being open to a fall or climbing above the tie-in point. Flagrant disregard for this rule will result in disqualification.
- 2.2.20 It is a competitor's responsibility to show that all cordage used as a climbing hitch in a moving rope (dynamic overhead belay climbing) system or as a climbing hitch in a stationary rope (static climbing) system has been approved by the manufacturer for use in that application.
- 2.2.21 Lines used for work positioning when using a moving rope system (see Appendix 5) shall be a minimum of 11 mm diameter and shall have a minimum breaking strength of 22 kN. Ropes used for ascending and stationary rope systems (see Appendix 5) shall be a minimum of 10 mm in diameter and shall have a minimum breaking strength of 22 kN. When using stationary rope systems, the competitor shall use a device that meets the criteria indicated in Rule 2.2.1 and is approved by the manufacturer for stationary rope systems as a stand-alone device. The device shall also be compatible for use with the line's diameter and construction
- 2.2.22 Climbing hitch cords for moving rope applications and those which support the entire system load (stationary rope applications) shall be of a doubled configuration if less than 10 mm and a minimum diameter of 8 mm. They shall also meet the requirements of Rule 2.2.1. Climbing hitch cords for stationary applications, where the load applied to the hitch is approximately half the system load, shall be of a doubled configuration if less than 8 mm and a minimum diameter of 6 mm. Climbing hitch cords shall be manufactured from material(s) suitably resistant to the abrasion and temperatures experienced during work and rescue scenarios. Competitors shall perform an "on-rope test" to demonstrate the effectiveness and adjustment of all climbing hitches. (2018)
- 2.2.23 Cords used for work-positioning lanyards shall be a minimum of 10 mm in diameter, and shall meet the minimum strength standards established for climbing lines and meet requirements of Rule 2.2.1.
- 2.2.24 The non-working end of any lanyard used in a fall-protection/work-positioning system shall have a fixed termination, such as a fixed stopper knot, eye splice, stitched eye, etc., that does not permit the

- non-working end of the lanyard to advance through the friction device (climbing hitch, frame-loaded ascender, cam-loaded ascender) or be securely connected to a rated connection point on the harness. (2018)
- 2.2.25 For the purposes of clarity in this rules document, the term "climbing hitch" includes both traditional hitches tied with cordage (Prusik, Valdôtain Tresse, etc.) as well as approved mechanical hitches. All climbing hitches shall be approved prior to being allowed for use in the competition.
- 2.2.26 A minimum of a double fisherman's bend shall be used to form the Prusik loop. Variations, including an endless splice, may be used with prior approval of the ITCC Head Technician. When footlocking using a Prusik loop, a six-coil Prusik hitch, a Klemheist, or other approved secure climbing hitch shall be used for fall protection. (2018)
- 2.2.27 Climbing hitches shall not be used for descent when using stationary rope systems, unless they are part of an approved configuration or system.
- 2.2.28 A competitor is not permitted to place his/her hands on or above the **climbing** hitch when it is used **to support the full weight of the competitor and is** the only means of being secured on a stationary rope system (static line). The first offense will generate a warning or penalty; a second offense will generate a disqualification. **(2018)**
- 2.2.29 A competitor who utilizes a mechanical ascender as a part of a stationary (static) rope system shall also include a system of backup to protect against an ascender malfunction. Mechanical ascenders, on a stationary (static) rope system, can be backed up with another ascender on the same line or a pliable Prusik cord that is placed above the mechanical ascender and on the same line as the ascender. If a double-line ascending system is used, both sides of the line shall be backed up independently. Prusik cordage shall meet the requirements of Rule 2.2.22 and shall be able to immediately grip and hold the line and support the competitor's weight should an ascender fail. All mechanical ascender-climbing systems shall be demonstrated and are subject to the Head Technician's prior approval.
- 2.2.30 Competitors may work from a stationary (static) rope system provided that when using an in-line configuration, engaged ascenders are not within the anchoring system. Fall-protection anchoring systems shall include an approved stopper knot, or hitch on the stationary (static) rope system no more than 45 centimeters (18 in) below the anchoring system, unless the climbing system is directly connected to an approved knot in the access line. Techniques for working from a stationary (static) rope system using an in-line anchor shall be demonstrated prior to use and during gear inspection, and shall have prior approval of the Head Technician.

- 2.2.31 A competitor will not be permitted to place his/her hands on or near the cams of ascenders unless the competitor is appropriately secured. The first offense will generate a warning; a second offense will generate a disqualification.
- 2.2.32 The competitor may not throw **or** lower any piece of equipment or gear from the tree while working aloft without prior approval from the Event Head Judge. Violation of this rule will result in the competitor being disqualified from that event. **(2018)**
- 2.2.33 A competitor will be disqualified for dropping a piece of equipment (accidentally or unannounced) while working aloft. (2018)
- 2.2.34 A competitor shall sound **an** audible warning in any situation where there is the potential for an item (any equipment, or part of the tree) to fall. Unless otherwise specified in an individual event, failure to call **an audible** warning will result in a 3-point penalty. A second offense will result in disqualification. **(2018)**
- 2.2.35 No climbing equipment (harnesses, work-positioning lanyards, ascenders, etc.) shall be altered in a manner that would compromise the integrity of the equipment. (i.e., drilling holes in or welding ascenders together). No alterations to equipment from its original manufacturer's design will be allowed without the express written consent of the manufacturer
- 2.2.36 A competitor using a secondary work-positioning system (lanyard) shall not attach both anchoring points of the system to the same side D-Ring(s) of the harness. Correct loading configurations include:
  - Connection from side D-Ring to opposite side D-Ring for horizontal work positioning; shall not be used for suspension.
  - Connection to both front D-Rings where available; may be used for suspension if so indicated by manufacturer of the harness.
  - Connection to a fixed or sliding ventral attachment point, singled or doubled; may also be used for suspension. When connecting from the ventral attachment point in a singled configuration and attaching the work-positioning system around a limb back onto a tie-in point on itself, correct loading of the connecting link shall be ensured at all times.
- 2.2.37 Competitors may use the handsaws provided, or they may use their own handsaws. The teeth of the handsaw shall be covered or removed to prevent injury and also to prevent cutting the bells out of the tree during the competition. Handsaws held in the mouth will result in disqualification.

2.2.38 Handsaws used in competition shall be no longer than 58 centimeters (23 in) or shorter than 33 centimeters (13 in) when measured from the tip of the blade to the end of the handle in a straight line.

#### 2.3 Other

- 2.3.1 Competitors will be advised in advance of the competition of any rule changes or modifications to the competition setup deemed necessary for the safety of the competitors or the competitive requirements of the event.
- 2.3.2 Competitors shall not watch or be in the immediate area during the setup of competition events. Failure to abide by this rule will be viewed as misconduct (see Rule 2.3.10).
- 2.3.3 A random drawing is held by the championship committee before the organization meeting to determine the order in which the participants will complete the events.
- 2.3.4 It is the responsibility of each competitor to be at each event at the scheduled time.
- 2.3.5 Competitors shall report to the Event Head Judge before they are scheduled to start an event. If a competitor does not report to the Event Head Judge within 5 minutes of the scheduled starting time, the competitor forfeits that event.
- 2.3.6 Competitors not currently competing shall not approach or talk to event judges while the **event** is in progress without the prior consent of the Event Head Judge. Failure to abide by this rule may result in disqualification. (2018)
- 2.3.7 Competitors may file an official protest if they feel they have been judged unfairly or incorrectly. Protests shall be made on an official protest form, which is available from the TCC Chairperson.
- 2.3.8 All protests shall be signed and submitted in writing by the competitor to the TCC Chairperson within 1 hour of the alleged rule infraction. The TCC Chairperson, Head Judge, and Head Technician will review the protest and make a ruling.
- 2.3.9 Misconduct in the presentation or discussion of protest is cause for immediate withdrawal of protest rights and/or possible disqualification.
- 2.3.10 A misconduct disqualification will be enforced by the Head Judge on any competitor who has displayed inappropriate, unprofessional, and/or unsportsmanlike behavior during participation in or after the completion of an event. Event Head Judges will enforce the rules for their individual event including infractions of the misconduct rule.

- 2.3.11 The use of alcoholic beverages or illegal drugs by any competitor, judge, technician, or official will result in immediate disqualification and removal of the individual from participation in the championship events.
- 2.3.12 It is the responsibility of the judges, technicians, and officials to read and understand the rules and regulations, to be able to interpret them in the spirit of the competition, and to enforce the competitors' adherence to them. All judges, technicians, and officials are expected to conduct themselves in a professional and appropriate manner at all times during the competition.
- 2.3.13 Once a competitor has begun an event, the Event Head Judge may instruct the competitor to stop if the judges need time to assess potential safety concerns, clarify rules, or take a closer look at equipment installation. The clock will stop with no time penalty to the competitor. Official time will begin again when the Event Head Judge says "Go" and instructs the competitor to proceed.
- 2.3.14 A competitor may not leave the designated event area once event time has started. (2018)
- 2.3.15 A competitor cannot score less than 0 in any of the five preliminary events

#### 3 WORK CLIMB EVENT

#### 3.1 Event Summary

The Work Climb Event tests the competitor's ability to move about the tree using a climbing line and harness. The event setup is the same for both male and female competitors. Each competitor starts from a staging area in the tree and is required to visit five work stations throughout the tree, performing a specified task at each station. Each station in the tree is equipped with a bell (or horn); the competitor shall ring the bell (or sound the horn) before continuing to the next station.

Competitors earn objective points for successfully completing the task at each station and ringing the bell (or sounding the horn) with either a handsaw, pole pruner, or hand, as indicated. At certain stations, a competitor can earn points for completing the additional tasks. Competitors can also lose points for failing to properly complete certain other tasks.

Competitors earn subjective points based on safety, control, style, poise, and creativity at the discretion of the judges. Finally, a competitor can be penalized for unsafe or uncontrolled acts at the discretion of the Event Head Judge. A second unsafe or uncontrolled act could result in disqualification.

The time limit for this event is 5 minutes.

#### 3.2 Work Climb Rules

- 3.2.1 Each competitor shall be equipped with, and use, (an):
  - approved climbing-style helmet,
  - approved eye protection,
  - approved tree-climbing harness,
  - approved (work-positioning) lanyard,
  - approved climbing line,
  - appropriate clothing and footwear, and
  - approved handsaw and scabbard.
- 3.2.2 All equipment and practices shall satisfy applicable industry safety standards.
- 3.2.3 The competitor's climbing line is set in a predetermined tie-in point. The same tie-in point is to be used by all competitors. Competitors may choose their own route and climbing line placement through the work stations unless otherwise directed by the Event Head Judge, but competitors shall finish with the landing station.
- 3.2.4 Once a competitor has been identified to the judges, the competitor is asked if he or she has any questions and is reminded of the event requirements.
- 3.2.5 The judges start the clock when a competitor signals to the judges by sounding an air horn or bell in the tree. The judges stop the time when a competitor has safely landed, is in a standing position, and has fully disconnected the climbing line and **climbing** hitch from the tree-climbing harness. (2018)
- 3.2.6 Competitors shall be safely tied in with a climbing line and/or secured with a work-positioning lanyard at all times while in the tree. While at each work station (handsaw, limb toss, pole pruner, and limb walk) the competitor shall be safely tied in with a climbing line and shall be correctly secured with a work-positioning lanyard before ringing the bell (see Rule 2.2.36). A competitor who breaks this rule will receive a warning and a 3-point penalty. A second failure to use the work-positioning lanyard correctly will result in disqualification. Competitors are not required to lanyard in prior to sounding the horn/bell at the landing station.
- 3.2.7 If a competitor breaks a large branch, or is for any reason considered by the judges to be performing an unsafe practice, penalty points will be assessed and/or the competitor may be disqualified at the discretion of the Event Head Judge.

3.2.8 Competitors shall complete the task at each work station to earn points for that station. If a competitor fails to complete the task, no scoring or discretionary points are earned or lost for the station(s). (2017)

#### 3.3 The Handsaw Station

- 3.3.1 To complete the task at this station, the competitor shall:
  - Lanyard in.
  - Call **an audible warning** prior to ringing the bell.
  - Ring the bell with his/her handsaw.

To earn maximum scoring points, the competitor shall also:

- Use his/her lanyard correctly.
- Ring the bell with two hands on the handsaw before continuing to the next station. (2018)

#### 3.4 The Limb Toss Station

- 3.4.1 To complete the task at this station, the competitor shall:
  - Lanyard in.
  - Call **an audible warning** prior to ringing the bell.
  - Ring the bell with his/her handsaw.

To earn maximum scoring points, the competitor shall also:

- Use his/her lanyard correctly.
- Ring the bell with two hands on the handsaw, prior to throwing the first limb at the target on the ground.
- Hit the target on the first throw. (2018)

#### 3.4.2 Audible warnings shall be given prior to each throw. (2018)

- 3.4.3 This station is equipped with two sections of limb for each **competitor** and a target on the ground. The dimensions of the limbs shall be approximately 30 centimeters (12 in) long and have a diameter of approximately 5 centimeters (2 in). The diameter of the target on the ground shall be 75 to 125 centimeters (30 to 48 in). **(2018)**
- 3.4.4 A competitor shall not throw two limbs at the target at the same time. If a competitor attempts to toss two limbs at the target at the same time, neither of the limbs thrown at the target can score.

- 3.4.5 A competitor receives 3 points if the limb lands fully within and remains fully within the target on the first throw. The limb shall not bounce into the target.
- 3.4.6 If unsuccessful with the first attempt, a competitor may throw a second time and will receive 2 points if the limb lands and remains fully within the target. (2018)
- 3.4.7 If a competitor misses on the second throw, no throwing points are received.

#### 3.5 The Pole Pruner Station

- 3.5.1 To complete the task at this station, the competitor shall:
  - Lanyard in.
  - Call **an audible warning** prior to ringing the bell.
  - Ring the bell with the pole pruner.

To earn maximum scoring points, the competitor shall also:

- Use his/her lanyard correctly.
- Use the working end of the pole pruner.
- Ring the bell with two hands on the pole pruner.
- Correctly re-hang the pole pruner. (2018)
- 3.5.2 A 3-point penalty will be given if a competitor rings the bell with the wrong end of the pole pruner, rehangs the pole pruner incorrectly, or fails to use two hands on the pole pruner. (2018)
- 3.5.3 Before moving to the next station, a competitor shall successfully rehang the pole pruner in the same location and position. If the competitor fails to do so and is instructed by the Event Head Judge to return to the station and re-hang the pole pruner correctly, a 3-point penalty will be assessed. Time will continue during this process.

#### 3.6 The Limb Walk Station

- 3.6.1 To complete the task at this station, the competitor shall:
  - Start the station by touching the predetermined mark on the limb with at least one foot.
  - Walk out on the limb.
  - · Lanyard in.
  - Call an audible warning prior to ringing the bell.

- Ring the bell with his/her handsaw.
- Walk back to and touch the predetermined mark.

To earn maximum scoring points, the competitor shall also:

- Use his/her lanyard correctly.
- Ring the bell with two hands on the handsaw.
- Touch the predetermined mark again without excessive movement of the plumb bob. (2018)
- 3.6.2 The plumb bob is set to measure both vertical and horizontal branch movement. If a competitor successfully completes the task without causing excessive branch movement, 2, 4, or 6 additional points are awarded, based on predetermined marks. (2018)
- 3.6.3 Competitors, once past the predetermined mark, shall *walk* on and keep a minimum of one foot in contact with the limb at all times. If a competitor loses control and falls, or swings from the limb, s/he shall return to the last point of contact before proceeding. The Event Head Judge will determine the last point of contact. (2017)

#### 3.7 The Landing Station

- 3.7.1 To complete the task at this station, the competitor shall:
  - Call an audible warning prior to ringing the bell.
  - Sound the horn/bell with his/her hand.

To earn maximum scoring points, the competitor shall also:

- Land and remain standing upright.
- Land with both feet inside the inner ring of the target.

The competitor is not required to lanyard in prior to sounding the horn or bell by hand. (2018)

- 3.7.2 A competitor who doesn't land and remain in a standing position (i.e., falls during landing or touches the ground with any part of the body other than feet) will not receive the 3 scoring points for landing and remaining standing up.
- 3.7.3 The target for the landing shall be 2 meters in diameter. A 1-meter-diameter solid circle is drawn in the center of the target and is identified as the inner ring of the target.
- 3.7.4 Competitors can receive up to 4 additional points for landing in a standing position on the target. Competitors shall land with both feet

planted and under control. When a competitor lands with one foot, that foot shall remain in the same position, but may change orientation, until the second foot is planted; at this time the score will be determined. A competitor can land outside the target with the initial contact foot and step into the target to increase points; however, should the competitor attempt to increase points by moving the initial contact foot, zero bonus landing (inner ring/outer ring) points will be awarded.

- 3.7.5 If any part of the foot touches the line, a competitor is scored as going outside the line. (Example: One foot on the outer circle line and the second foot out of the outer circle is scored as 0 points.)
- 3.7.6 Time stops when a competitor has landed, is in a standing position, and has fully disconnected the climbing line and **climbing** hitch from the harness. (2018)
- 3.7.7 A competitor who does not sound the horn or bell by hand before descending will not receive any points for completing the task or any additional points at the landing station. (2018)
- 3.7.8 A mark on the lower part of the tree shall be made to indicate the start of the landing zone. A competitor who touches the tree below that mark or any other objects below the mark will be deemed to have landed and will receive no landing (target) points for that station. The competitor will also not receive 3 points for landing with only feet touching the ground. (2017)

#### 3.8 Scoring the Work Climb (80 possible points)

- 3.8.1 There will be either three or five Work Climb judges. When five judges are available, the high and low scores are thrown out, and the remaining three scores are averaged to provide the official score.
- 3.8.2 **Points** for this event are based on two categories: **judges' scoring** and time. **(2018)**
- 3.8.3 Fifty potential points can be earned including scoring points and judges' discretionary points.
- 3.8.4 No scoring points are awarded for any task not completed correctly. To receive scoring points at any of the work stations, competitors shall complete all tasks as outlined in 3.3.1, 3.4.1, 3.5.1, 3.6.1, and 3.7.1.
- 3.8.5 Penalty points are levied for various infractions, including failure to use a lanyard correctly, failure to call a warning, failure to use the working end of the pole, failure to use two hands on the pole pruner, and failure to re-hang the pole properly. (2018)

- 3.8.6 Judges award discretionary points at each station based on performance. Points are earned for fair, good, or exceptional performance. No points are earned for unsafe or below average performance (See scoring guidelines on Quick Reference Guide). (2018)
- 3.8.7 The event is also timed with up to 30 potential Time Points.
- 3.8.8 The competitor with the fastest time earns 30 points.
- 3.8.9 Other competitors receive a 1-point deduction from the 30-point total for every 10 seconds their time exceeds the fastest time.
- 3.8.10 If a competitor reaches the time limit and has not finished the event, or has not rung the bell at each work station, s/he will not receive any Time Points for the event and will only receive scoring points accumulated up to that point. Judges' discretionary points may be assigned up until the time limit is reached (see Rule 3.2.8). (2017)
- 3.8.11 In case of a tie, the competitor with the fastest time wins.

#### 3.9 Penalties

#### **Mandatory Penalties**

A 3-point penalty and audible warning will be given by the Event Head Judge for each of the following violations:

- 3.9.1 Failure to use work-positioning lanyard correctly when required.
- 3.9.2 Failure to issue an audible warning. (2017)
- 3.9.3 Failure to use the working end of the pole pruner to ring the bell.
- 3.9.4 Failure to properly re-hang the pole pruner.
- 3.9.5 Failure to use two hands on the pole pruner. (2018)

#### **Discretionary Penalties**

A 3-point penalty and audible warning will be given by the Event Head Judge for any of the following infractions:

- 3.9.6 Dangerous uncontrolled swing.
- 3.9.7 Failure to maintain a taut climbing system or climbing above the tie-in point.
- 3.9.8 High-speed or dangerous movement.

#### 3.10 Disqualification

#### **Mandatory Disqualifications**

A competitor will be disqualified by the Event Head Judge for the following infractions:

- 3.10.1 Dropped piece of equipment.
- 3.10.2 Any piece of equipment left in tree except the pre-installed climbing line.
- 3.10.3 Breaking of sizable branch (branch size to be decided prior to the event, at the Event Head Judge's discretion).
- 3.10.4 Failure to remain tied in to the tree on at least one point of attachment.
- 3.10.5 Being more than 5 minutes late for event.
- 3.10.6 Placing handsaw in the mouth.
- 3.10.7 Misconduct.
- 3.10.8 A second discretionary penalty.
- 3.10.9 A second failure to use a work-positioning lanyard when required.
- 3.10.10 A second failure to issue an audible warning. (2017)
- 3.10.11 Failure to be equipped with all required equipment once event time has started, per Rule 1.1.6. (2018)

#### 4 AERIAL RESCUE EVENT

#### 4.1 Event Summary

The Aerial Rescue Event is a timed event that tests the competitor's ability to climb to and safely lower a climber who is unable to descend without assistance. The event setup is the same for male and female competitors.

Prior to the event walk-through, the Event Head Judge provides the competitors with the event scenario (see Appendix 3 for examples of event scenarios.) The rescue scenario explains the injuries and details of the climber's situation.

Competitors shall perform a risk assessment, a pre-climb assessment, and an on-site casualty assessment, and should use all relevant techniques to ensure that the rescue process does not exacerbate the situation. The injured climber (dummy) should be lowered as safely, carefully, and efficiently as possible.

The competitor, as first responder, will assume control of the site, take control of all relevant safety issues, and ensure that local emergency services are contacted.

**Event Setup:** The injured climber (represented by a dummy) weighing 60–80 kg (132–176 lbs) is installed in the tree with a regulation climbing line and harness preferably no higher than 7.5 meters (25 ft) above the ground. The competitor shall enter the tree using a previously installed climbing line, installed no closer than 4.5 meters (15 ft) from the injured worker. Competitors are provided with 5 minutes to complete the event.

#### 4.2 Aerial Rescue Rules

- 4.2.1 Each competitor shall be equipped with, and use, (an):
  - approved climbing-style helmet,
  - approved eye protection,
  - approved tree-climbing harness,
  - approved work-positioning lanyard, and
  - appropriate clothing and footwear.
- 4.2.2 Competitors shall enter the tree using the installed line.
- 4.2.3 Competitors may not use the injured climber's line to enter into or descend from the tree.
- 4.2.4 Competitors shall lower the injured climber on the injured climber's line or an approved line other than the competitor's own unless Rule 4.2.5 is used.
- 4.2.5 When a rescue dummy is used and fitted with an approved independent fall-arrest system during the event setup meeting the requirements of Rule 4.2.6, the casualty may be transferred to and lowered on the competitor's climbing system, but the dummy shall remain attached to the independent fall-arrest system at all times. When using only the competitor's climbing system for lowering the casualty, the anchor point shall be strong enough to hold the increased weight. Prior to the rescue dummy being detached from its climbing system, additional friction shall be added to the competitor's system to safely manage the anticipated weight.
- 4.2.6 When using fall-arrest equipment, a full-body harness shall be used and attached dorsally to the dummy. The fall-arrest system shall be manufactured to meet or exceed the minimum accepted industry safety standard and shall be of the inertia-reel type. The system shall be calibrated to the weight of the dummy and drop tested prior to the event.
- 4.2.7 The competitor shall issue **an** audible warning before lowering the injured climber safely to the ground. **(2018)**

- 4.2.8 Once a competitor has been identified to the judges, the competitor is asked if he or she has any questions and is reminded of the event requirements.
- 4.2.9 Timing begins when the Event Head Judge says "Go" and instructs the competitor to proceed.
- 4.2.10 Competitors shall remain tied in on a separate climbing line or secured with a work-positioning lanyard throughout the event.
- 4.2.11 Competitors may work off the pre-installed access line or may carry another climbing line into the tree (see Rules 2.2.29 and 2.2.30).
- 4.2.12 Time is stopped when a competitor has lowered the injured climber (dummy) safely to the ground and has unclipped the climbing system from the injured climber's (dummy's) harness. In the case of a scenario as outlined in Rule 4.2.5, time is stopped when the dummy has been unclipped from the competitor's climbing system.
- 4.2.13 If a competitor runs out of time before unclipping the injured climber from the climbing harness, the competitor shall stop the climb and follow the instructions of the Event Head Judge.
- 4.2.14 A competitor who fails to finish within the time limit will be called to the ground. The competitor receives points only for tasks that were completed within the time limit. The competitor is still eligible to receive points in any of the 5 scoring sections, even if all the tasks pertinent to that section have not been completed. (2017)
- 4.2.15 If a competitor enters the tree using an ascending technique NOT approved for descent or lateral movement, the competitor shall, if required, lanyard in, and then tie in with an approved climbing hitch before beginning to move laterally in the tree. The maximum allowable distance of the lateral movement prior to the competitor tying in with an approved climbing hitch will be predetermined by the Event Head Judge. Failure to abide by this rule will be considered an unsafe act. (2018)
- 4.2.16 A competitor may leave equipment in the tree provided the Event Head Judge is informed before the climb. The Event Head Judge then makes arrangements to retrieve the equipment at the end of the competitor's climb.

#### 4.3 Scoring the Aerial Rescue (50 possible points)

4.3.1 There will be either three or five Aerial Rescue judges. When five judges are available, the high and low scores are thrown out, and the remaining three scores are averaged to provide the official score.

4.3.2 Up to 45 points are awarded in total for five scoring sections. Each scoring section is worth between 7 and 13 points as detailed below.

Risk Assessment and Rescue Plan 7		
Ascent and Movement to the Casualty	7	points
Casualty Assessment and Handling	13	points
Descent	7	points
Landing	11	points

- 4.3.3 Up to 5 efficiency points can be awarded based on completion time. Scoring Efficiency Points:
  - 5 points 75.01 seconds or more below time limit
  - 4 points -60.01 to 75.00 seconds below time limit
  - 3 points 45.01 to 60.00 seconds below time limit
  - 2 points 30.01 to 45.00 seconds below time limit
  - 1 point -15.01 to 30.00 seconds below time limit
  - 0 points -00.00 to 15.00 seconds below time limit
- 4.3.4 In case of a tie, the competitor with the fastest time wins.

#### 4.4 Penalties

#### **Discretionary Penalties**

A 3-point penalty and audible warning will be given by the Event Head Judge for any of the following infractions.

- 4.4.1 Failure to maintain a taut climbing system or climbing above the tie-in point.
- 4.4.2 Dangerous uncontrolled swing.
- 4.4.3 High-speed or dangerous movement.
- 4.4.4 Failure to issue an audible warning when necessary (excluding descent with dummy). (2017)
- 4.4.5 Excessive lateral movement when using an ascending system not approved for descent or lateral movement (see 4.2.15). (2018)

#### 4.5 Disqualification

#### Mandatory Disqualifications

A competitor will be disqualified by the Event Head Judge for the following infractions:

- 4.5.1 Dropped piece of equipment.
- 4.5.2 Failure to remain tied in to the tree on at least one point of attachment.
- 4.5.3 Being more than 5 minutes late for event.
- 4.5.4 Misconduct.
- 4.5.5 Breaking of sizable branch (size to be decided prior to the event, at the Event Head Judge's discretion).
- 4.5.6 Tampering with the dummy's independent fall-arrest system.
- 4.5.7 Failure to safely manage the friction required for the additional weight of the dummy.
- 4.5.8 Placing handsaw in the mouth.
- 4.5.9 A second discretionary penalty.
- 4.5.10 Failure to be equipped with all required equipment once event time has started, per Rule 1.1.6. (2018)

#### 5 THROWLINE EVENT

#### 5.1 Event Summary

The Throwline Event is a timed event that tests the competitor's ability to accurately place a throwline and/or climbing line in a tree. Competitors attempt to toss a throwline or climbing line through two of eight targets. Targets can be located in a single tree, four on each side; or in multiple trees as long as there are two distinct sets of four targets. Each competitor is allowed unlimited throws within 6 minutes, but a competitor can score in only one target on each side of the tree. A single throw may be used to score a target on each side of the tree, as long as both targets can be completely isolated.

The lines may be manipulated in the tree. This includes attaching more than one throwline or climbing line together to perform manipulation techniques. Additional lines used for manipulation techniques shall be removed from the tree prior to the stoppage of time or the competitor will be assessed a 1-point penalty for each additional non-scoring line left in the tree.

Additional points may be earned for installing a climbing line on each side of the tree. The value of these additional points depends on the difficulty of the target. Installing a climbing line in a 9-point throw is worth 4 points. See Rule 5.3.4 for points earned for installing a climbing line.

Competitors may also earn Time Points for efficiency. The competitor needs to score in each set of targets to be eligible for Time Points. For a breakdown of the Time Points, see Rule 5.3.6. (2018)

#### 5.2 Throwline Rules

- 5.2.1 Each competitor shall be equipped with, and use, (an):
  - approved climbing-style helmet,
  - · approved eye protection, and
  - appropriate clothing and footwear.
- 5.2.2 The throwline or climbing line shall be thrown by hand from within the predetermined throwing area. Once a line is installed, an approved flipstick may be used to manipulate the line into position. Devices such as sling shots or other mechanical devices may not be used in the Throwline Event
- 5.2.3 Competitors may use up to three throwlines and up to two climbing lines.
- 5.2.4 Competitors may use equipment provided, or they may use their own throwlines and climbing lines if these have been approved by the judges.
- 5.2.5 A competitor tells the judges when he or she is ready to proceed and waits for the Event Head Judge's signal to start. Time starts when the Event Head Judge says "Go" and instructs the competitor to proceed.
- 5.2.6 A competitor can throw at any target, in any order, any number of times, and the throwline or climbing line can be manipulated into the desired position once it has been placed in the tree. If the throwline is outside the target, and a climbing line is attached and **used to manipulate the throwline** into the target, points for the throwline will be awarded if registered before time runs out **and the throw meets the requirements of Rule 5.2.7.** This includes attaching more than one throwline or climbing line together to perform manipulation techniques. (2018)
- 5.2.7 A throw is considered legal and scores only when:
  - the throwline or climbing line is isolated within the target (i.e., no other parts of the tree between the lines),
  - the competitor, who is standing on the ground, is holding both ends of the line (throwline or climbing line), and
  - the competitor has asked the Event Head Judge to register the throw.

The target area includes the width of the tape (from outside edge to outside edge). If a climbing line is thrown, it scores the points for both the throw and the installation once the above conditions have been met. (2018)

- 5.2.8 When asked by the competitor to register a throw, the **Event Head** Judge will determine whether the throw meets the criteria in Rule 5.2.7. (2018)
- 5.2.9 If the **Event Head** Judge decides that a throw is not legal, the competitor is notified and that throw is not registered. It is the responsibility of the competitor to make sure the judges have accepted the throw as legal. **(2018)**
- 5.2.10 A competitor can score only twice (with one throw in each of the two sets of targets), and a throw can score only if it is legal and the judges are told to register it.
- 5.2.11 Once the judges are told to register a throw, it cannot be changed.
- 5.2.12 A competitor who breaks a limb larger than a minimum specified diameter and smaller than a maximum specified diameter shall be penalized 1 point for each broken limb, unless it is determined by the Event Head Judge that the break was not due to any unnecessary force being applied to the limb. A third broken limb will result in disqualification. The minimum and maximum limb diameters to incur a 1-point penalty will be set by the Event Head Judge prior to the beginning of the competition.
- 5.2.13 A competitor who breaks a limb larger than the predetermined maximum size shall be disqualified unless it is determined by the Event Head Judge that the break was not due to any unnecessary force being applied to the limb.
- 5.2.14 The final time is recorded when a competitor has successfully installed both climbing lines in the tree(s), when the competitor requests the time to stop, or when time has expired.
- 5.2.15 In the event of a tie, the competitor with the fastest time wins. If the final times are the same, a second tiebreaker will be used: the 'first score time.'
- 5.2.16 The 'first score time' is recorded only for the purposes that it may be needed as a second tiebreaker. The 'first score time' is registered at the first time the competitor asks for either a throwline or climbing line to be registered.
- 5.2.17 Competitors will be provided 6 minutes to set up and complete the event unless, at the discretion of the Event Head Judge, an alternative time limit is set.
- 5.2.18 Competitors shall install at least one climbing line over one of the targets within the time limit. A competitor who does not install a climbing line will be penalized 3 points from the score accumulated before time expired.

- 5.2.19 Any non-scoring lines still in the tree at the end of the competitor's event will incur a 1-point penalty per line.
- 5.2.20 If a competitor's line is within a scoring target, it shall be registered with the Event Head Judge by saying "Score" prior to the competitor throwing again. If the line is not registered with the Event Head Judge prior to the next throw, it cannot be registered and scored at a later stage in that competitor's event. To earn points for the same side of the tree, the competitor shall pull the throwline out of the tree or use a different throwline and re-throw. If the unscored line is still in the tree at the end of that competitor's event, it incurs a 1-point penalty. (2017)
- 5.2.21 A competitor whose climbing line becomes detached and falls from the throwline before it is placed in the target area and declared legal will not be disqualified for dropped equipment.
- 5.2.22 If the throwline was not declared a legal score before the climbing line was dropped, the competitor may re-throw the throwline or climbing line at the same set of targets. (2017)
- 5.2.23 A competitor who cannot reach a declared and legally scored throwline and re-attach it to the climbing line is finished with that side of targets. The competitor will receive points only for the declared and legally scored throwline.
- 5.2.24 If a competitor's throw weight and/or climbing line leaves the flagged area during a throw, while being manipulated or otherwise removed from the tree, a 3-point penalty is assessed. A second offense will result in disqualification from the event.
- 5.2.25 Competitors shall issue **an** audible warning and receive confirmation from the Event Head Judge before throwing or removing a throwline with the throw weight attached. An audible warning shall also be issued before manipulation of the throwline when the possibility of accidental removal of the throw weight exists. Failure to issue audible warnings will result in a 1-point deduction for each infraction of this rule. Two 1-point audible penalty warnings will be issued. The third offense will result in disqualification. **(2018)**

#### **5.3** Scoring the Throwline (30 possible points)

- 5.3.1 Competitors may register a maximum of two throws with the judges: one score per set of targets. (2017)
- 5.3.2 The time taken to legally register the first score will be recorded, as well as the time to legally register both throws (and/or also install the climbing lines).

- 5.3.3 The highest (or most difficult) target scores 9, the middle targets score 7 and 5 respectively, and the lowest (or easiest) target scores 3.
- 5.3.4 Additional points can be scored for installing a climbing line over one target in each set. Installing a climbing line in a 9-point throw is worth 4 points, a 7-point throw is worth 3 points, a 5-point throw is worth 2 points, and a 3-point throw is worth 1 point.
- 5.3.5 A 3-point penalty is assessed to any competitor who does not install at least one climbing line within the time limit provided.
- 5.3.6 A competitor can also score Time Points for efficiency. Time Points are awarded as follows:
  - 4 points completed the event in 3:00.00 minutes or less
  - 3 points completed the event between 3:00.01 and 4:00.00 minutes
  - 2 points completed the event between 4:00.01 and 4:30.00 minutes
  - 1 point completed the event between 4:30.01 and 5:00.00 minutes
  - 0 points completed the event between 5:00.01 and 6:00.00 minutes

Competitors need to score in both sets of targets to be eligible to earn Time Points. (2017)

- 5.3.7 A competitor can score a maximum of 18 points for hitting the targets (9 points on each side of the tree) and an additional maximum of 8 points (4 points on each side of the tree) for installing climbing lines. A competitor can also score a maximum of 4 points for completing the event in 3:00.00 minutes or less. (2017)
- 5.3.8 A competitor's final placing is based on score, with the highest point total determining the winner.
- 5.3.9 In the event of a tie, the competitor with the fastest final time is the winner. If the final times are identical, the competitor with the fastest first score time is the winner.

#### **Example scoring:**

#### Competitor A

Scores 9 points for hitting the top target, 4 points for installing a climbing line on the first side, and an additional 5 points for hitting a middle target on the other side of the tree, but receives a 1-point penalty for failing to issue an audible warning and runs out of time before installing the climbing line.

Competitor A scores 9 + 4 + 5 - 1 = 17 points; time 6:00 minutes.

#### Competitor B

Scores 7 points for hitting a middle target and an additional 3 points for installing a climbing line on the first side. *Competitor B* then scores 5 points for hitting the lower middle target on the other side and scores an additional 2 points for installing the climbing line in the second target area. *Competitor B* finishes the event in 3:54.00 and earns an additional 3 Time Points.

Competitor B scores 7 + 3 + 5 + 2 + 3 = 20 points; time 3:54.00 minutes. (2017)

#### Competitor C

Scores 9 points for hitting the top target on the first side of the tree and then scores an additional 9 points for hitting the top target on the other side but runs out of time before installing a climbing line. *Competitor* C receives a 3-point deduction for not installing a climbing line. *Competitor* C scores 9 + 9 - 3 = 15 points; time 6:00 minutes.

#### Competitor D

Scores 9 points for hitting the top target and an additional 4 for installing the climbing line in the target. Moving to the second side of the tree, the competitor then gets a throwline struck, which can't be removed, but rebounds and scores 5 points for a throw into the lower middle target. At this point, *Competitor D* asks the Event Head Judge to stop time. *Competitor D* receives a 1-point penalty for the line left in the tree.

Competitor D scores 9 + 4 + 5 - 1 = 17 points; time 5:46.00 minutes.

Competitor placing would be 1<sup>st</sup> – B; 2<sup>nd</sup> – D; 3<sup>rd</sup> – A; 4<sup>th</sup> – C.

#### 5.4 Penalties

#### **Mandatory Penalties**

A competitor will be penalized for the following infractions:

- 5.4.1 3-point penalty for not installing a climbing line.
- 5.4.2 1-point penalty for each non-scoring line or throw weight left in the tree when time expires.
- 5.4.3 3-point penalty for the throw weight or climbing line landing outside the flagged area.
- 5.4.4 1-point penalty for breaking a limb within the diameter range designated by the Event Head Judge prior to the beginning of the competition. Up to two 1-point penalties will be allowed. A third broken limb within the specified diameter range will result in disqualification.

5.4.5 1-point penalty for each failure to issue an audible warning and receive confirmation from the Event Head Judge before throwing or removing any throwline with a throw weight attached. Up to two 1-point penalty warnings will be audibly issued by the Event Head Judge. The third offense will result in disqualification.

#### 5.5 Disqualification

#### **Mandatory Disqualification**

A competitor will be disqualified for the following infractions:

- 5.5.1 Being more than 5 minutes late for event.
- 5.5.2 Two throws (throwlines with weights attached or climbing lines) that land outside the flagged area.
- 5.5.3 Third offense of failure to issue an audible warning.
- 5.5.4 Misconduct.
- 5.5.5 Third offense of breaking a limb within the diameter range as set by the Event Head Judge prior to the beginning of the competition.
- 5.5.6 Failure to be equipped with all required equipment once event time has started, per Rule 1.1.6. (2018)

#### **Discretionary Disqualification**

A competitor may be disqualified, at the discretion of the judges, for the following infractions:

5.5.7 Breaking of a limb larger than the maximum diameter designated by the Event Head Judge prior to the beginning of the competition.

#### 6 BELAYED SPEED CLIMB EVENT

#### 6.1 Event Summary

The Speed Climb Event tests the competitor's ability to climb a predetermined route from the ground to about 18 meters (60 ft) up a tree with a belayed climbing system for safety. The event is timed, and the competitor who reaches and rings the final bell of the course in the least amount of time wins. There could be more than one bell placed in the tree to determine the route; in such an event, the climber shall ring all the bells to complete the event.

#### 6.2 Belayed Speed Climb Rules

- 6.2.1 Each competitor shall be equipped with, and use, (an):
  - approved climbing-style helmet,
  - approved eye protection,
  - · approved tree-climbing harness, and
  - appropriate clothing and footwear.
- 6.2.2 Competitors shall be tied in with an approved climbing line and friction hitch or device at all times. An impartial belayer provides belay for the competitor during the climb.
- 6.2.3 Competitors signal the judges when ready and wait for the Event Head Judge to signal that the timers are ready to begin.
- 6.2.4 The judges start the clock when the competitor's second foot leaves the ground.
- 6.2.5 The judges stop the clock when the competitor rings the final bell with his/her hand. (2018)
- 6.2.6 Competitors shall follow the predetermined route and remain tied in at all times.
- 6.2.7 After completing the climb, the competitor is responsible for bringing the climbing line back down the tree to set the course for the next competitor.
- 6.2.8 When technician belayed, the competitor may not use the section of the climbing line from the termination attachment on the climbing harness to the top pulley block (the lead of the rope) to advance their position. If this section of the climbing line is used to advance position, the first offense will generate a warning; a second offense will generate a disqualification.
- 6.2.9 Competitors may use the section of the climbing line from the top pulley block to the ground (the fall of the rope) to aid the climb, or lines set in the tree exclusively to aid in ascent.
- 6.2.10 Certain branches may be marked with tape to denote a point beyond which the competitor cannot touch. A first offense of touching beyond these marks will result in a 1-point penalty. A second offense will result in disqualification. (2017)
- 6.2.11 A competitor who breaks a limb larger than the predetermined maximum size may be disqualified at the discretion of the Event Head Judge.

## 6.3 Scoring the Belayed Speed Climb (15 possible points)\*

- 6.3.1 There will be either three or five Belayed Speed Climb timers. When five timers are available, the high and low times are thrown out, and the remaining three times are averaged to provide the official time.
- 6.3.2 The event is based purely on time.
- 6.3.3 The fastest competitor to the top is the winner and receives 15 points.
- 6.3.4 The remaining competitors' scores are calculated by subtracting the fastest competitor's time (in seconds) from the times of each of the other competitors.
- 6.3.5 For every 2-second difference in time between those scores, 1 point (of the 15 possible points) is deducted from the competitor's score.

## **Example scoring:**

The fastest competitor completes the climb in 2 minutes, 27.46 seconds (147.46 seconds).

The second-fastest competitor completes the climb in 2 minutes, 41.82 seconds (161.82 seconds).

Time difference = 161.82 - 147.46 = 14.36 seconds = 7.18 point deduction.

The fastest competitor receives 15 points.

The second-fastest competitor receives 7.82 points (15 - 7.18).

\*If the Footlock Event is run, the Belayed Speed Event is worth 20 points.

## 6.4 Penalty

## **Mandatory Penalty**

The following infraction will result in a 1-point penalty:

6.4.1 Touching branch beyond tape. (2017)

## 6.5 Disqualification

## **Mandatory Disqualification**

A competitor will be disqualified for the following infractions:

- 6.5.1 Second infraction of using the lead of the rope to advance position.
- 6.5.2 Dropping a piece of equipment.
- 6.5.3 Failure to remain tied in.

- 6.5.4 Being more than 5 minutes late for event.
- 6.5.5 Misconduct
- 6.5.6 Second infraction of touching branch beyond tape. (2017)
- 6.5.7 Failure to be equipped with all required equipment once event time has started, per Rule 1.1.6. (2018)

### **Discretionary Disqualification**

A competitor may be disqualified, at the discretion of the Event Head Judge, for the following infractions:

- 6.5.8 Dangerous uncontrolled swing.
- 6.5.9 Leaping or jumping, creating excessive slack.
- 6.5.10 Breaking of a sizable branch (size to be determined by the Event Head Judge prior to the event).

### 7 ASCENT EVENT

## 7.1 Event Summary

The Ascent Event tests the competitor's ability to efficiently and safely use their selected and approved ascent system. The event assesses the competitor's efficiency in attaching the ascent system to the ascent line(s), ascending to the bell, and transferring into a descent system. The actual descent is not part of the event. Points are earned for speed as well as for meeting predetermined safety objectives.

**Event Setup:** The height can be set from 12 to 25 meters (39 ft, 4.5 in to 82 ft, 0.25 in). The finishing bell shall be installed at a distance of 38 centimeters (15 in) horizontally from the competitor's line. Three sets of times will be recorded: Setup Time (attachment of ascending system to ascent line(s) and on-rope rest), Ascent Time (climb from ground to predetermined height), and Changeover Time (conversion from ascent to descent system). Motorized ascent systems may not be used during the event.

Ascent lines may be set in three configurations (Appendix 7) on a lowerable attachment point. Any combination of mechanical device and knotted cordage approved during gear inspection may be used **for an ascent system**. Systems will be set up, including the transfer to descent, during the gear inspection and recorded on the scoresheets. The system used during the Ascent Event must be the same system demonstrated during gear inspection. **(2018)** 

The ascent lines shall be attached to a lowerable attachment point, controlled by a ground technician using a haul line. Additionally, an overhead belay system shall be in place and competitors shall be on belay at all times while aloft.

### 7.2 Ascent Event Rules

- 7.2.1 Each competitor shall be equipped with, and use, (an):
  - approved climbing-style helmet,
  - approved eye protection,
  - approved tree-climbing harness (lightweight harness with dorsal attachment will be provided to be worn under the climber's harness, if required),
  - approved ascent and descent system, and
  - appropriate clothing and footwear.
- 7.2.2 Each competitor may configure the ascent line(s) in any format of his/ her choice on a lowerable attachment point, as outlined in Appendix 7. The attachment point will be lowered for each competitor for setup approval. Competitors may use the installed line(s) provided for the event or replace the line(s) with an approved climbing line(s) of the competitor's choice prior to the timed portion of the event.
- 7.2.3 The **Event** Head Technician will verify from the scoresheet that the ascent and descent systems used are the same ones demonstrated during gear inspection. If they are not, the competitor will not be permitted to compete in the Ascent Event. **(2018)**
- 7.2.4 An impartial belayer provides belay for the competitor during the climb.
- 7.2.5 Competitors shall keep the belay line attached to the harness and remain on belay at all times while participating in this event.
- 7.2.6 The technician shall perform a test to demonstrate the effectiveness and adjustment of the belay safety equipment with the competitor attached.
- 7.2.7 The competitor may have his/her climbing system, including non-PPE components, as fully assembled as desired, but nothing may be attached to the line(s) prior to the start of the event. Any pre-weighting of the ascent line (e.g., adding a shot pouch or tying a knot in the ascent line) is not permitted prior to the **Event** Head Judge saying "Go." Any moving rope system shall have a stopper knot installed at the end of the line(s) prior to the competitor setting up his/her ascent system. (2018)

## **Setup Time**

7.2.8 The competitor shall start the event from a 1-meter (~3-ft) diameter circle marked on the ground. The center of the circle shall be 3 meters (~10 ft) from the ascent line(s).

- 7.2.9 The competitor advises the Event Head Judge when ready and waits for the Event Head Judge to signal that the timers and technicians are ready to proceed.
- 7.2.10 Three times shall be recorded for setup. The timers start the clock when the Event Head Judge says "Go."
- 7.2.11 When the Event Head Judge says "Go," the competitor steps out of the circle and attaches his/her ascent system to the ascent line(s). The competitor must attach and configure the ascent system completely, including any foot/knee ascenders, foot loops, chest harnesses, tethers/tenders, etc. The competitor then performs an on-rope test by raising both feet off the ground and placing both arms out away from his/her body, ensuring that body weight is placed in the ascent system, and not accessory components. This will signal to the Event Head Technician that the competitor has completed the setup. No part of the competitor's body may be in contact with the ground during the on-rope test.
- 7.2.12 The timers stop the clock when the Event Head Technician, as signaled by the competitor holding arms out and taking both feet off the ground, says "Time."
- 7.2.13 Once time has stopped, the Event Head Technician confirms the correct setup.
- 7.2.14 If the setup is not successful (e.g., system does not hold or components are not attached), setup Time **Points** will not be awarded. **(2018)**
- 7.2.15 If any life-support components are not attached or are configured incorrectly, a 3-point mandatory penalty will be given, in addition to the lost setup Time **Points.** It is the competitor's responsibility to ensure proper and complete setup prior to signaling to the Event Head Technician. (2018)
- 7.2.16 Once the system has been fully evaluated, the competitor may descend back to the ground. At this time, the competitor has the opportunity to adjust his/her system (this includes any weight that has been added to the line) before starting their timed ascent. No components of the pre-approved, configured system may be changed. If changes must be made (e.g., addition of a foot ascender, chest harness, tethers/tenders, gloves, etc.), the competitor forfeits his/her setup Time Points. (2018)
- 7.2.17 The time limit for the setup is 90 seconds.

### **Ascent Time**

- 7.2.18 The competitor advises the Event Head Judge when ready and waits for the signal that the timers and technicians are ready to proceed.
- 7.2.19 Three times shall be recorded for ascent. The timers start the clock when the competitor's second foot leaves the ground.

- 7.2.20 The timers stop the clock when the competitor rings the bell at the top of the climb with his/her hand.
- 7.2.21 The time limit for the ascent is 90 seconds. (2018)

## **Changeover Time**

- 7.2.22 Three times shall be recorded for the changeover to descent. The timers start the clock when the competitor rings the bell at the top of the climb.
- 7.2.23 After ringing the bell, the competitor must change over to his/her approved descent system. All components of the system that may hinder descent must be detached from the competitor or the ascent line, such that the competitor is able to **descend** (e.g., foot ascenders must be detached from the ascent line, but ascenders may be left on the ascent line above the competitor if they are detached from the competitor). Violations of this rule will result in loss of changeover Time Points. (2018)
- 7.2.24 All components of the ascent system shall be stowed, as defined in Appendix 5, on the ascent line or competitor. Violations of this rule will result in loss of changeover Time Points. (2018)
- 7.2.25 The timers stop the clock when the competitor rings the bell at the top of the climb a second time.
- 7.2.26 The tree technician must verify that the descent system is attached correctly and no components from the ascent **system** remain that may hinder descent. If the descent system is not correct, the competitor will not receive changeover **Time** Points. **(2018)**
- 7.2.27 Once the descent mode has been verified by the tree technician, the competitor shall retrieve any components left on the ascent line. After the competitor has communicated with the belayer his/her intent to descend, the competitor may do so at a safe speed.
- 7.2.28 The descent is not a timed portion of the event.
- 7.2.29 The time limit for the changeover is 90 seconds.

## 7.3 Scoring the Ascent Event (25 possible points)

- 7.3.1 For each section recorded, three stopwatches are used. Time is recorded to the hundredth of a second.
- 7.3.2 For the Setup and Changeover times, up to 3 Time Points can be awarded based on completion time. Time Points are awarded as follows:

- 3 points completed in 9.99 seconds or less
- 2 points completed in 10.00 to 24.99 seconds
- 1 point completed in 25.00 to 44.99 seconds
- 0 points completed in 45.00 to 89.99 seconds (2018)
- 7.3.3 A competitor who fails to finish within the time limit in any of the three sections of the event will be called to the ground and will receive only those points accumulated within that time. The time limit for each section of the event is 90 seconds. (2018)
- 7.3.4 For the ascent, the three times are averaged to produce the final ascent time. The competitor with the fastest ascent time will receive 17 points.
- 7.3.5 The remaining competitors' scores are calculated by subtracting the fastest competitor's time (in seconds) from the times of each of the other competitors.
- 7.3.6 For every **1**-second difference in time between those scores, 1 point (of the 17 possible points) is deducted from the competitor's score.

## **Example scoring:**

The fastest competitor (A) completes the ascent in 0:12.49 seconds.

The second-fastest competitor (B) completes the ascent in 0:13.33 seconds

Time difference = 0.13.33 - 0.12.49 = 0.84 seconds = 0.84 point deduction.

The fastest competitor receives 17 points.

The second-fastest competitor receives 16.16 points (17 - 0.84) for the ascent. (2018)

- 7.3.7 Two additional points will be earned for incorporating a **system** backup in an ascent system (see Appendix 5 for definition). **(2018)**
- 7.3.8 In case of a tie, the competitor with the fastest ascent time wins.

### 7.4 Penalties

## **Mandatory Penalties**

A competitor will receive a 3-point penalty and a warning for the following infractions:

- 7.4.1 Tampering or interfering with components of the fall-protection equipment.
- 7.4.2 Preventing the correct function of a mechanical device.

- 7.4.3 Placing hands above a footlock Prusik.
- 7.4.4 Misconfigured or detached life-support components during the timed portion of the event.

## 7.5 Disqualification

### **Mandatory Disqualification**

A competitor will be disqualified for the following infractions:

- 7.5.1 A second mandatory penalty.
- 7.5.2 Dropping a piece of equipment while working aloft.
- 7.5.3 Failure to remain tied in.
- 7.5.4 Being more than 5 minutes late for event.
- 7.5.5 Misconduct.
- 7.5.6 Failure to be equipped with all required equipment once event time has started, per Rule 1.1.6. (2018)

### 8 MASTERS' CHALLENGE

## 8.1 Event Summary

The Masters' Challenge is the championship round of the competition. The top men and top women finishers from the preliminary round advance to the Masters' Challenge to compete for the title. The Masters' Challenge is designed to judge the competitors' overall productivity and skill with a rope and harness in the tree. Competitors are judged and scored on their knowledge and their ability to demonstrate mastery of different climbing techniques, use of equipment, poise in the tree, and safe working practices.

At the Event Head Judge's signal, "Go," a competitor enters the designated work area. The competitor shall perform a visual tree assessment, install any necessary climbing equipment, and then enter the tree. The competitor proceeds to three work stations in the tree. In some situations, a fourth station may be added to increase the difficulty of the climb and provide additional opportunity for the judges to assess a competitor's abilities. Each competitor may choose the route and order in which to approach the work stations. At each work station, a competitor should demonstrate the ability to work freely with both hands

At each of the stations, the competitor shall ring a bell **with a handsaw** before continuing to the next station. One of the stations is equipped with a graduated plumb bob suspended from the limb. If a competitor **generates excessive movement of** the limb, causing the plumb bob to move and touch a marker,

fewer points are earned for completing the activity. Another station is equipped with limbs in a bucket and a target on the ground. A competitor is tested on his/her ability to toss limbs to a designated area. A competitor can make three attempts to land a limb into a target. A maximum time to complete the event is specified in advance. The climb is timed to assess overall productivity, but the Masters' Challenge is not a speed event. (2018)

## 8.2 Masters' Challenge Rules

- 8.2.1 Each competitor shall be equipped with, and use, (an):
  - approved climbing-style helmet,
  - approved eye protection,
  - approved handsaw and scabbard,
  - approved tree-climbing harness,
  - · approved work-positioning lanyard, and
  - appropriate clothing and footwear.
- 8.2.2 Prior to a competitor starting the event, all equipment shall be placed in a designated area inside the event arena. Once the time starts, no more equipment can be brought into the designated area or event arena.
- 8.2.3 All personal protective equipment shall meet the requirements of Rule 2.2.1.
- 8.2.4 The number of competitors who advance to the Masters' Challenge depends on the total number of competitors in the event. For competitions with 30 or fewer, three advance; 31 to 40, four advance; 41 or greater, five advance. Exceptions may be made with the approval of the organizing TCC committee and prior to the beginning of the competition.
- 8.2.5 If one of the top competitors is unable to participate, the competitor with the next highest score may climb as an alternate, at the discretion of the Head Judge.
- 8.2.6 Once the top competitors have been determined, the Head Judge sets the order in which the competitors climb. The top finisher is given first choice, followed in order of finish during the preliminary round.
- 8.2.7 Competitors are then sequestered until it is time for each individual competitor to climb. Competitors are sequestered where they cannot visually or audibly benefit until it is time for each individual competitor to climb.
- 8.2.8 A competitor shall not witness or listen to comments about another competitor's climb before the time s/he is scheduled to climb, but may

- watch after completing his or her own climb. For example, the second competitor may not watch the first competitor, but the first competitor may watch the second.
- 8.2.9 The Head Judge shall set an adequate time limit for a competitor to set up, install a climbing line, perform the climb, and remove all climbing equipment from the tree. This time shall be established and announced before the event begins.
- 8.2.10 Official timing begins when the Event Head Judge says "Go" and instructs the competitor to proceed.
- 8.2.11 Official timing stops when a competitor returns to the ground and successfully removes all equipment installed during the event (including all throwlines/throw weights, climbing lines, and climbing hardware). Equipment is considered removed from the tree when it is no longer in contact with the tree. (2018)
- 8.2.12 If a competitor does not complete the climb within the time limit, the score received to that point is used as the competitor's score. A competitor will be called to the ground by the Event Head Judge if the time limit elapses or safety standards are violated.
- 8.2.13 If a competitor fails to remove all the equipment in the tree within the time limit, a 20-point penalty will be assessed.
- 8.2.14 The event is timed as a means of assessing overall productivity. Preliminary ranking will count as a tiebreaker in the case of identical scores. If preliminary rankings are identical, Masters' time is the final tiebreaker.
- 8.2.15 Previously installed climbing lines are not permitted in this event.
- 8.2.16 A competitor receives 10 points for installing the throwline on the first attempt. Each throw attempt thereafter will be worth 2 points fewer, with the fifth attempt worth 2 points. Additional throw attempts will receive 0 points. If more than one access line or climbing line is set by the competitor, points for installing the throwline will only be awarded for the first access or climbing line set.
- 8.2.17 The tree is divided into five sections for scoring the setting of the throwline in the tree. A competitor receives 1 point for installing the throwline in the lowest section and 5 points for the highest section. A competitor who utilizes more than five throws to install a throwline receives no height points.
- 8.2.18 A competitor may receive up to 3 additional points, awarded at the discretion of the judges, for creative technique and/or skill displayed while setting the throwline. A competitor who utilizes more than five throws to install a throwline may receive bonus points if applicable.

- 8.2.19 Competitors shall issue **an** audible warning and receive confirmation from the Event Head Judge before throwing or removing a throwline with the throw weight attached. An audible warning shall also be issued before manipulation of the throwline when the possibility of accidental removal of the throw weight exists. Failure to issue audible warnings prior to each throw will result in a 1-point deduction for each infraction of this rule. Two 1-point audible penalty warnings will be issued. A third offense will result in disqualification. (2018)
- 8.2.20 The competitor shall issue an audible warning prior to ringing the bell at each station or tossing **each** limb. **(2018)**
- 8.2.21 If a competitor's throwline with weight attached leaves the flagged area during a throw, while being manipulated or otherwise removed from the tree, a warning will be issued. A second offense will result in disqualification from the event.
- 8.2.22 A competitor is awarded up to 10 points for successfully completing each of the following activities:
  - a. Handbell Stations: Competitor is required to ring bell with a handsaw.
  - b. Limb Toss Station: Competitor is required to first ring bell and then throw a limb at a designated target. If unsuccessful, a competitor may throw a second or third limb. Only one throw will be scored. Ringing the bell is worth 4 points and a successful limb toss is worth 2, 4, or 6 additional points, resulting in a maximum of 10 points. No points will be awarded if the bell is not rung prior to throwing the limb. See Rule 3.4.3 for limb size and target size specifications. (2017)
  - c. Graduated Plumb Bob Station: The competitor will attempt to ring the bell with a handsaw without allowing the plumb bob to pass the markers. The markers will be worth 4, 7, and 10 points. If the weight passes the lowest point marker, the competitor does not receive any points for successfully completing the activity (section F on scoresheet) at that station. (2018)
  - d. No completion points are awarded at stations where a competitor fails to correctly complete the required activity.
- 8.2.23 Each competitor is scored on the criteria identified on the official scoresheet.
- 8.2.24 A competitor will be disqualified for dropping a piece of equipment while working aloft. When the competitor is working on the ground during the official timed period (e.g., setting or removing lines or equipment in the tree), equipment that hits the ground will not result in an automatic disqualification. Rather, these infractions shall be judged using

the appropriate sections of the scoresheet. Safe use of equipment such as throwbags and various friction-reducing devices should be rewarded. A competitor who removes equipment (e.g., throwbags, friction-reducing devices, ropes) from the tree in an uncontrolled or unsafe manner shall be penalized. It shall be up to the discretion of the judges whether the infractions are deemed accidental or intentional and penalties levied accordingly. An unsafe act may result in disqualification.

## 8.3 Scoring the Masters' Challenge (up to 300 possible points)

- 8.3.1 There will be either three or five Masters' Challenge judges. When five judges are available, the high and low scores are thrown out, and the remaining three scores are averaged to provide the official score.
- 8.3.2 The judges score a competitor's movements from the time the official time begins until the competitor finishes all the work stations, returns to the ground, and successfully removes all equipment installed during the event; runs out of time; or is disqualified.
- 8.3.3 A competitor receives points only for tasks that were completed within the time limit. If the competitor times out, s/he should receive points in any of the scoring sections even if all of the tasks pertinent to that section have not been completed.
- 8.3.4 Individual scoresheets are provided to each of the Scoring Judges for each competitor.
- 8.3.5 Preliminary points do not carry over to the Masters' Challenge. The overall winner of the competition will be the competitor with the highest point total in the Masters' Challenge. For tiebreakers, see Rule 8 2 14

#### 8.4 Penalties

## **Mandatory Penalties**

A competitor will be penalized for the following infractions:

- 8.4.1 A 20-point deduction will be assessed for failing to retrieve all equipment within the time limit.
- 8.4.2 A 1-point penalty for each failure to issue an audible warning before throwing or removing a throw weight (includes mechanical devices).
- 8.4.3 A 3-point penalty for failure to issue an audible warning when necessary while aloft. (2017)

### **Discretionary Penalties** (determined by the Scoring Judges)

8.4.4 A competitor can receive up to a 5-point deduction for any of the following: unsafe acts, poor performance, or poor techniques.

## **Discretionary Penalties** (determined by the Event Head Judge)

A 3-point penalty and audible warning will be given for any of the following infractions:

- 8.4.5 Dangerous uncontrolled swing.
- 8.4.6 Failure to maintain a taut climbing system or climbing above the tie-in point.
- 8.4.7 High-speed or dangerous movement.

## 8.5 Disqualification

## **Mandatory Disqualification**

A competitor will be disqualified for the following infractions:

- 8.5.1 Dropping a piece of equipment while working aloft.
- 8.5.2 Failure to remain tied in to the tree on at least one point of attachment.
- 8.5.3 Third offense of failure to issue an audible warning prior to throwing or removing a throw weight. (2017)
- 8.5.4 Second offense of failure to issue an audible warning when necessary while aloft. (2017)
- 8.5.5 Two throws (throwlines with weights attached or climbing lines) that land outside the flagged area.
- 8.5.6 Being more than 5 minutes late for event.
- 8.5.7 Misconduct.
- 8.5.8 Leaving the predesignated area or bringing in equipment from outside the predesignated area once the official time has begun.
- 8.5.9 Placing handsaw in the mouth.
- 8.5.10 Breaking of sizable branch (size to be decided prior to the event, at the Event Head Judge's discretion).
- 8.5.11 A second discretionary penalty (as determined by Event Head Judge).
- 8.5.12 Failure to be equipped with all required equipment once event time has started, per Rule 1.1.6. (2018)

### 8.6 Potential Bonuses

- 8.6.1 A competitor may receive up to 5 additional bonus points, at the judges' discretion, for each of the following (for a total of 15 potential bonus points):
  - Overall demonstration of skill, style, and presentation throughout the climb.
  - Use of innovative techniques and equipment.
  - Overall demonstration of safe work practices and techniques, including visual tree assessment.

## **World-Record Attempt for Secured Footlock**

The following criteria shall be met for a chapter or other group to sponsor a Secured Footlock event for the purposes of setting a new world record.

- 1. ISA staff shall be notified in advance of the world-record attempt. An independent judge to be in attendance will be confirmed at this point. (2018)
- 2. A current member of an ITCC Committee (Rules, Operations, Technical, ETCC/NATCC/APTCC) serves as an independent judge.
- The chapter or associate organization undertaking the attempt shall arrange for an appropriate ITCC committee member to be present and pay all associated costs.
- 4. All equipment used by the climbers and officials shall satisfy the requirements listed in the current ITCC rules and regulations.
- 5. The rules for the Secured Footlock event shall be followed (see Rules X.1–X.5.4 online).
- 6. When electronic timing is used, an additional three manual timings by stopwatch shall be taken as a backup in case of failure of the electronic timing device. If the electronic device fails, the three manual times will be added together and an average time recorded. The three manual times recorded shall have no more than 50/100ths of a second difference between the fastest and slowest time to qualify for recording. If times fall outside this range, no world-record time can be recorded.
- 7. When only manual timing is used, five stopwatches shall be used, and the highest and lowest times are discarded. The three remaining times will be added together and an average time recorded. The three manual times recorded shall have no more than 50/100ths of a second difference between the fastest and slowest time to qualify for recording. If times fall outside this range, no world-record time can be recorded.
- 8. A world-record time will not be considered official until the request for validation form (attached) has been completed, returned to the ITCC staff liaison at ISA headquarters, and signed by the ITCC Chairperson.
- 9. Photos and videos shall be used to document verified height measurements, before and after the climb. (2018)

## INTERNATIONAL SOCIETY OF ARBORICULTURE

## **Secured Footlock World-Record Attempt Event Request**



## **Event Information**

Name of Chapter/AO	
Name of Event	
	e present
Date Event to be held	
<u>0</u>	Contact Information
Chapter/AO President's Name	
Chapter/AO President's Signature	
	(include international code) E-mail
Local TCC Chairperson's Name	
Address	
Phone Number	

Send this request to: ITCC Staff Liaison ISA PO Box 3129 Champaign IL 61826-3129, USA



## INTERNATIONAL SOCIETY OF ARBORICULTURE

# Secured Footlock World-Record Attempt Request for Validation

EVENT:	LOCATION:	DATE:	
I request ISA validation for a 50-foo attempt by:	*	n's Secured Footlock world-record	
Chapter president's or TCC Local	Chairperson's signature:	Date:	
I confirm that the height to the low taking place, and that its height wa	•		
Operations/Rules Committee Men	nber:	Date:	
I confirm that the electronic time			
Electronic Timer's Signature		Recorded Time	
I confirm that the manual time I	recorded for this attempt is	s a true and valid time of	
Timer #1 Signature		Recorded Time	
I confirm that the manual time I	recorded for this attempt is	s a true and valid time of	
Timer #2 Signature		Recorded Time	
I confirm that the manual time I	recorded for this attempt is	s a true and valid time of	
Timer #3 Signature Recorded Time			
I confirm that the manual time I	recorded for this attempt is	s a true and valid time of	
Timer #4 Signature		Recorded Time	
I confirm that the manual time I			
Timer #5 Signature		Recorded Time	
I confirm I was present at this at for the attempt made by	tempt and verify that the ti	mes recorded above are correct	
Operations/Rules Committee Member Signature: Date:			
World-Record Attempt—Average	ge Recorded Time:		

Climber's Name	
Address	Phone
	E-mail:

## **OPERATIONS/RULES COMMITTEE MEMBER**

Name .		
Address		Phone
-		E-mail
	Electronic Timer	
Name		
Address		Phone
		E-mail
	Manual Timer #1	
Name .		
Address		Phone
-		E-mail
	Manual Timer #2	
Name .		
Address		Phone
-		E-mail
	Manual Timer #3	
Address		Phone
-		E-mail

Manual Ti	mer #4
Name	
Address	Phone
	E mail
Manual Tii	mer #5
Name	
Address	Phone
	E mail
ITCC Committe	ee Use Only
Attending ITCC Committee Member Signature	e Date
ITCC Committee Chairperson Signature	Date
F-11	
Following verification send to:	Copies:
ITCC Staff Liaison	Copies:  ITCC Committee Members Local Chapter President

Champaign, IL 61826-3129, USA

Competitor

## **Head-to-Head Secured Footlock Event Summary**

The Head-to-Head Secured Footlock is a stand-alone event. A Head-to-Head Secured Footlock event may take place at any competition held under the auspices of ISA.

The Secured Footlock measures a competitor's ability to perform a vertical ascent into a tree using a Prusik hitch or other approved friction hitch for fall protection and the footlock rope-climbing method on a doubled climbing line. The height is 15 meters (49 ft, 2.5 in) for both the men's and women's events. A height of 12 meters (39 ft, 4.5 in) may be used for both the men's and women's events at chapter level if height constraints are an issue. Mechanical ascenders may not be used. The event is timed, and the competitor with the fastest time wins.

In the Head-to-Head Secured Footlock, two climbers compete at a time on separate climbing systems, with separate timing systems in use.

All equipment used by the competitors and officials shall satisfy the requirements listed the current ITCC rules and regulations.

Rules X.2.1–X.2.17, X.3.1, and X.4.1–X.5.4 online from the Secured Footlock Event shall be followed.

When electronic timing is used, an additional three manual timings by stop-watch shall be taken as a backup in case of failure of the electronic timing device. If the electronic device fails, the three manual times will be added together and an average time recorded. The three manual times recorded shall have no more than 50/100ths of a second difference between the fastest and slowest time to qualify for recording. If times fall outside this range, no world-record time can be recorded.

When only manual timing is used, five stopwatches shall be used, and the highest and lowest times are discarded. The three remaining times will be added together and an average time recorded. The three manual times recorded shall have no more than 50/100ths of a second difference between the fastest and slowest time to qualify for recording. If times fall outside this range, no world-record time can be recorded.

If all requirements of Appendix 1 (World-Record Attempt for Secured Footlock) are met, times will be recorded as world records.

## **Aerial Rescue Event Scenario Examples**

The event committee should write an aerial rescue scenario for their individual event. The scenario should be kept confidential prior to the competition and be outlined for the competitors during the event walkthrough meeting prior to the start of the competition.

The following are examples of possible aerial rescue event scenarios:

## Example #1

Weather conditions—35° C (95° F) Sunny / high humidity

Situation—You notice that the climber is not moving in the tree.

Climber condition—The climber is conscious, breathing hard, and his face is red. He is also having trouble communicating.

### Example #2

Weather conditions—15° C (59° F) Cloudy and wet

Situation—A climber has slipped and fallen while moving through the tree. She has taken a violent swing, hitting the main trunk.

Climber condition—The climber is conscious but is holding her left arm. She is in pain and is unable to descend from the tree.

## Example #3

Weather conditions—21° C (70° F) Sunny

Situation—A climber is working in a takedown situation, and has cut the back of his left leg with a chainsaw.

Climber condition—The climber is unable to stop the bleeding while in the tree.

## **Guidelines for Divisions with One or Two Competitors**

In the event that there are only one or two competitors in a division (male or female) at the chapter level, the potential climber representative shall be deemed to be eligible to compete at ITCC if s/he meets the criteria listed below during the chapter competition.

In the event that there are three or more climbers at the chapter level (in either division), the criteria below do not apply.

The competitor shall attempt each of the five preliminary events, and score points in three of the five events.

The competitor shall successfully complete at least two stations in the Work Climb (excluding the landing station) before time runs out, then descend to the ground in a controlled manner and detach from his/her climbing system thus demonstrating an ability to safely move through the tree.

The competitor shall attempt a Masters' Challenge climb and, at a minimum, set a climbable line, enter the tree, and reach one station before timing out.

The intention of these criteria is to provide any serious competitor, regardless of his or her degree of experience or time in the field, with an opportunity to rise to the challenge of competing at the international level.

#### **Definitions**

**Moving rope system (see Rule 2.2.21)**—A fall-protection system in which the rope adjustment device advances along a moving line. Doubled rope technique (Drdt) or running rope systems are examples of moving rope systems (contrast with stationary rope system).

Stowed (see Rule 7.2.24)—Secured, connected, and not loose, to eliminate the possibility of falling and to minimize excessive swing. (2018)

**Stationary rope system (see Rule 2.2.21)**—A fall-protection system in which the rope adjustment device moves along a stationary working line (contrast with moving rope system).

System backup (see Rule 7.3.7)—An additional device or configuration used to back up an approved, primary ascending system. System backups may be attached to the same climbing line as the primary ascending system (e.g., rope grab, mechanical ascender, six-coiled Prusik, or other accepted device) or to a second climbing line (e.g., mobile fall-arrester). Both climbing lines are attached to the same anchor point. (2018)

#### Tree Technicians' Guide

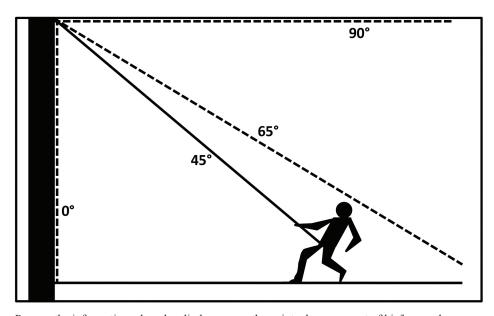
The following information is to be relayed to the Event Head Judge, Event Head Technicians, and Scoring Judge on the ground by radio:

- Proof loading of system prior to use during climb.
- Use of lanyard, when it is installed while moving out onto limb.
- Slack in the line
- Line angle during limb walk.
- Dangerous actions.

Further information shall only be transmitted upon demand from the ground.

Try to be consistent in the way you communicate the information between competitors.

Transmit facts, not opinion. Keep it short and concise.



Pass on the information when the climber passes the point where any part of his/her work-positioning system is at  $45^{\circ}$  from the vertical.

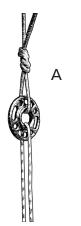
## **Ascent Event Attachment Configurations**

The following information is to be used by the setup crew throughout the event. This setup will be part of the lowerable attachment point used by competitors for the ascent.

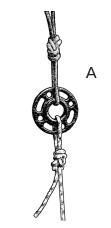
During the gear inspection, the Event Head Technician will ask competitors for their preferred configuration and record it on their respective scoresheet. This configuration selection may not be changed after gear inspection.

The overhead haul line (A) is attached using a retraced figure-8 knot. This haul line is part of the lowerable anchorage system.

The access line(s) can then be attached in three different configurations.



**Figure 1.** Moving: A single rope passed through the anchor in a moving rope setup.



**Figure 2.** Single stationary: A single rope attached using a retraced figure-8 knot in a stationary rope setup.



**Figure 3.** Double stationary: Double ropes attached using retraced figure-8 knots in a stationary rope setup.

## Scoresheets and Judges' Quick Reference Guides

The Judges' Quick Reference Guides (QRGs) are intended to be used as both training for new judges, as well as a reference throughout the competition. They are NOT a substitute to the Rule Book.

Prior to the start of setup of a competition, judges and technicians can refer to the QRG to see if there are any changes to setup, per rule changes.

Once the scoring and judging teams are formed the group can use the QRGs to review new rules. Any queries about new rules or the use of the scoresheets shall be addressed with the Head Judge and/or the Head Scorer. It is the responsibility of all judges and scorers to be completely familiar with the rules pertaining to their event.

During the event, the QRGs can be printed and adhered to the fronts of clip-boards for constant reference by judges, for penalties and disqualifications, landing specifications (Work Climb), and discretionary judging guidance (Masters' Challenge).

#### Work Climb

#### Standard Event Run Time: 5 minutes

This Judges' Quick Reference Guide is intended to help guide conversation prior to the event. It is not a substitute for reading the Rule Book. Please use this guide as you review the event with the judging team to ensure consistency across competitors and events.

#### Setup Notes

- The beginning of the limb walk shall be marked. The mark shall be a minimum of 30 cm (12 in) wide.
- The rules now require the plumb bob to measure movement in all directions. ISA recommends using a plumb bob that will redirect the weight horizontally to allow deflection in all directions. Contact ISA for design ideas.

#### **Rule Changes**

- 1.1.6—It is each competitor's responsibility to enter the arena with the required equipment stipulated for each event. Once event time has started, no additional equipment can be brought into the arena. Failure to abide by this rule will result in disqualification from that event.
- 3.3.1, 3.4.1, 3.5.1, 3.6.1, 3.7.1—Audible warning requirements have changed. Refer to these sections for specific changes.
- 3.5.2—A 3-point penalty will be given if a competitor rings the bell with the wrong end of the pole pruner, rehangs the pole pruner incorrectly, or fails to use two hands on the pole pruner.
- 3.7.1—To complete the task at this station, the competitor shall:
  - o Call an audible warning prior to ringing the bell.
  - Sound the horn/bell with his/her hand.
- 3.7.7—A competitor who does not sound the horn or bell by hand before descending will not receive any points for completing the task or any additional points at the landing station.

#### Scoring Guidelines

- Event Head Judges should announce if they are giving a penalty where repeat offense may result in a disqualification.
- Scoring points shall be the same for all judges. These are the double-lined boxes on the left side of the scoresheet.
- To earn time points, at a minimum, all bells must be rung. Mark the box on the upper left corner for each station as the competitor rings each bell.
- If a competitor does not complete a task, s/he does not earn or lose any scoring or discretionary points for that station. Write a zero for each box in that station.
- Discretionary points are assigned on a scale of 0 to +3. Use the following guidelines for assigning discretionary points:
- 3 Exceptional performance
- 2 Good performance
- 1 Fair performance
- 0 Unsafe or below average

#### Reminders

If the time limit of the event is changed, inform the scoring team.

PENALTY

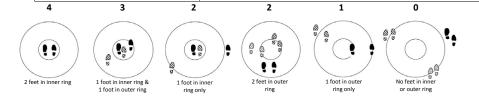
#### DISQUALIFICATION

• Failure to use work-positioning lanyard correctly when required.

- Failure to issue an audible warning.
- •Failure to use the working end of the pole pruner to ring the bell.
- · Failure to properly re-hang the pole pruner.
- Failure to ring the bell with two hands on the pole pruner.
- Dropped piece of equipment.
- Equipment left in tree except the pre-installed climbing line.
- Breaking of sizable branch.
- · Failure to remain tied in on at least one point of attachment.
- More than 5 minutes late for event.
- · Placing handsaw in the mouth.
- Misconduct
- A second discretionary penalty.
- A second failure to use a work-positioning lanyard when required.
- A second failure to issue an audible warning.
- Failure to be equipped with all required equipment once event time has started. None

 Dangerous uncontrolled swing. DISCRETIONARY · Failure to maintain a taut climbing system or climbing above the tie-in point.

· High-speed or dangerous movement.



## INTERNATIONAL TREE CLIMBING CHAMPIONSHIP WORK CLIMB

2018 REQUIRED EQUIPMENT Approved Eye Protection Approved Climbing Harness Approved Climbing-Style Helmet Approved Climbing Line Climber Name / Number: Appropriate Footwear Approved Handsaw and Scabbard Appropriate Clothing Approved Work-Positioning Lanyard Judge: Group: \_ FOR BOXES - JUDGES SHALL ALL AWARD THE SAME POINTS SCORING POINTS DISCRETIONARY POINTS **Handsaw Station** Completed Task: Discretionary Lanyarded in, gave audible warning, rang bell 0 2 Points w/ handsaw Bell 2 Rang bell w/ two hands on handsaw 0 3 **Limb Toss Station Completed Task:** Lanyarded in, gave audible warning, rang bell 0 2 Discretionary w/ handsaw Points Bell Rang bell w/ two hands on handsaw 0 3 Hit Target - First Throw 0 3 Hit Target - Second Throw 0 2 Completed Task: Pole Pruner Station Lanyarded in, gave audible warning, rang bell 0 2 w/ pole pruner Discretionary **Points** Bell Penalty Did not have two hands on pole pruner Used wrong end of pole 0 -3 Did not properly rehang pole -3 0 **Limb Walk Station** Completed Task: Discretionary Walked limb out, lanyarded in, gave audible warning, rang bell with handsaw, walked limb back 0 2 Points Bell Rang bell w/ two hands on handsaw 0 3 Plumb bob points 0 2 4 6 Completed Task: **Landing Station** Gave audible warning, sounded horn/rang bell w/ hand 0 2 Discretionary Points Bell Landed with only feet touching 0 3 2 3 Inner Ring - 1 foot in / 2 feet in 2 4 Outer ring - 1 foot in / 2 feet in **Mandatory Penalty:** TIMER 1 0 -3 DQ Failure to issue an audible warning 1/100 SEC Penalty Failure to use lanyard correctly 0 -3 DQ TIMER 2 1/100 SEC **Discretionary Penalty:** For unsafe acts as determined by 0 -3 DQ Event Head Judge Reason for DQ: YES ALL BELLS RUNG? NO SCORER USE ONLY SCORE ENTERED SCORE CHECKED

### **Aerial Rescue**

#### Standard Event Run Time: 5 minutes

This Judges' Quick Reference Guide is intended to help guide conversation prior to the event. It is not a substitute for reading the Rule Book.

Please use this guide as you review the event with the judging team to ensure consistency across competitors and events.

#### **Setup Changes**

 There were no significant changes made to this event. Please review the Rule Book if you are unfamiliar with this event.

#### **Rule Changes**

 1.1.6—It is each competitor's responsibility to enter the arena with the required equipment stipulated for each event. Once event time has started, no additional equipment can be brought in to the arena. Failure to abide by this rule will result in disqualification from that event.

#### **Scoring Guidelines**

- Event Head Judges should announce if they are giving a penalty where repeat offense may result in a disqualification.
- Scoring points shall be the same for all judges. These are the double-lined boxes on the left side of the scoresheet.
- If a competitor does not show up for the event, inform the scoring team.

#### Reminders

- This event requires three (3) or five (5) judges.
- If the time limit for the event is changed, inform the scoring team.
- The dummy needs to be between 60–80 kg (132–176 lbs).

	PENALTY	DISQUALIFICATION
MANDATORY		Dropped piece of equipment.
		Failure to remain tied in to the tree on at least one point of attachment.
		More than 5 minutes late for event.
		Misconduct.
	None	<ul> <li>Breaking of sizable branch (size to be decided prior to the event, at the Event Head Judge's discretion).</li> </ul>
		• Tampering with the dummy's independent fall-arrest system.
		<ul> <li>Failure to safely manage the friction required for the additional weight of the dummy.</li> </ul>
		Placing handsaw in the mouth.
		A second discretionary penalty.
		Failure to be equipped with all required equipment once
		event time has started.
	Failure to maintain a taut climbing system or	
₹	climbing above the tie-in point.	
ž	<ul> <li>Dangerous uncontrolled swing.</li> <li>High-speed or dangerous movement.</li> </ul>	Name
잍	Failure to issue an audible warning when	None
DISCRETIONARY	necessary (excluding descent with dummy).	
SCI	Excessive lateral movement when using an	
ă	ascending system not approved for descent or	
	lateral movement. (See 4.2.15)	

## INTERNATIONAL TREE CLIMBING CHAMPIONSHIP

**AERIAL RESCUE** 2018 REQUIRED EQUIPMENT Approved Eye Protection Approved Climbing-Style Helmet Appropriate Footwear Climber Name / Number: Approved Climbing Line Approved Work-Positioning Lanyard Approved Climbing Harness Appropriate Clothing Judge: Group: FOR BOXES - JUDGES SHALL ALL AWARD THE SAME POINTS SCORING POINTS DISCRETIONARY POINTS Risk Assessment & Rescue Plan Contacted emergency services and provided relevant information 0 Scoring Points Communicated with the casualty Assessed hazards and determined if safe to perform rescue 0 1 and determined responsiveness Communicated and initiated rescue plan 0 - 6 0 or 1 **Ascent & Movement to the Casualty** Safe, smooth and efficient ascent 0 Discretionary Scoring Points Verified ascent line and anchor Safe, suitable and efficient point are safe to use movement to casualty Communicated appropriately with casualty and ground personnel 0 or 1 0 - 6 **Casualty Assessment & Handling** Assessed casualty injury and equipment 0 Discretionary Points Scoring Administered appropriate first aid 0 Secured at the casualty in a 1 safe working position Stabilized casualty correctly for transport 0 or 1 0 - 12Transfered casualty from attachment/branch to competitor Descent Maintained casualty in stable and suitable position 0 Scoring Safe, smooth and controlled descent Issued audible warning before 1 beginning descent Communicated condition of casualty and instructions to ground personnel 0 or 1 0 - 6 Landing Landed casualty in a comfortable position appropriate to injury Scoring Competitor and casualty **Points** landed on the ground Reached ground in a comfortable posture Unclipped casualty within the Audible communications and timely transfer to emergency services time limit 0 1 4 or 5 **Discretionary Penalties for unsafe acts** Penalty NOTES: determined by Event Head Judge 3 1/100  $\square$ TIMER 1 0, 3, or DQ TIMFR 2

63

SCORE ENTERED

REASON FOR DQ: SCORER USE ONLY

SCORE CHECKED

### **Throwline**

#### Standard Event Run Time: 6 minutes

This Judges' Quick Reference Guide is intended to help guide conversation prior to the event. It is not a substitute for reading the Rule Book.

Please use this guide as you review the event with the judging team to ensure consistency across competitors and events.

#### **Setup Reminders**

• The heights of the targets should be between 10 and 20 meters (32.8 and 65.6 ft).

#### **Rule Changes**

- 1.1.6—It is each competitor's responsibility to enter the arena with the required equipment stipulated for each event.
   Once event time has started, no additional equipment can be brought in to the arena. Failure to abide by this rule will result in disqualification from that event.
- 5.2.6—A competitor can throw at any target, in any order, any number of times, and the throwline or climbing line can
  be manipulated into the desired position once it has been placed in the tree. If the throwline is outside the target, and a
  climbing line is attached and used to manipulate the throwline into the target, points for the throwline will be awarded
  if registered before time runs out and the throw meets the requirements of Rule 5.2.7. This includes attaching more
  than one throwline or climbing line together to perform manipulation techniques.
- 5.2.25—Look for change in audible requirement.

#### **Scoring Guidelines**

- Event Head Judges should announce if they are giving a penalty where repeat offense may result in a disqualification.
- Record the first score time and the final time. The first score time is registered at the first time the competitor asks for
  either a throwline or climbing line to be registered.
- The final score time is recorded when a competitor has successfully installed both climbing lines in the tree(s), when the
  competitor requests the time to stop, or when time has expired.
- Time Points are assessed based on the final time. If scores are tied, the competitor with the fastest final time is the
  winner. If times are identical, the competitor with the fastest first score time is the winner.

#### Reminders

• If the time limit of the event is changed, inform the scoring team.

#### PENALTY DISQUALIFICATION • Not installing a climbing line. (3 points) Being more than 5 minutes late for event. • Each non-scoring line or throw weight left in the tree Two throws (throwlines with weights attached or climbing lines) that land outside the flagged area. when time expires. (1 point) • Throw weight or climbing line landing outside the Third offense of failure to issue an audible warning. flagged area. (3 points) MANDATORY • Breaking a limb within the diameter range designated Third offense of breaking a limb within the diameter by the Event Head Judge prior to the beginning of the range as set by the Event Head Judge prior to the competition. Up to two 1-point penalties will be beginning of the competition. allowed. (1 point) Failure to be equipped with all required equipment • Failure to call an audible warning and receive once event time has started. confirmation from the Event Head Judge before throwing or removing any throwline with a throw weight attached. Up to two 1-point penalty warnings will be allowed. (1 point) Breaking of a limb larger than the maximum DISCRETIONARY diameter designated by the Event Head Judge prior None to the beginning of the competition.

## INTERNATIONAL TREE CLIMBING CHAMPIONSHIP THROWLINE

				2010
REQUIRED EQUIPMENT  Approved Eye Protection  Approved Climbing-Style Helmet  Approved Climbing Line(s)  Approved Throwline(s) and Throw Weight(s)  Appropriate Footwear  Appropriate Clothing	Climber I	Name / Number:		Group:
SIDE 1			SIDE 2	
Target Score Installatic Climbing +		Target Score	+	Installation of Climbing Line
7 +	2	7		
<u>                                   </u>	ا ا	<u>                                   </u>	·············· ' ········	
5 + 2	2	5	+	2
3	1	3	+	1
Total Side 1			Total Side 2	
TIME				
FIRST SCORE TIME  FINAL SCORE TIME  MIN SEC 1/100  MIN SEC 1/100				
PENALTIES				
No climbing line installed			-3	TOTAL PENALTIES
Non-scoring line left in tree (-1 point per line)	)		-1 -2 -3	
Failing to control a throw weight or climbing l	line with	in event area	-3 DQ	
Breaking a branch within the diameter range	:		-1 -2 DQ	
Failure to issue an audible warning (-1 point	per occ	urance)	-1 -2 DQ	0-13
SCORE SIDE 1				
SIDE 2 PENALTIES SCORE				
NOTE: The scoring program will calculate Time Poi REASON FOR DQ:				
TILAGON FOR DQ.				
SCORER USE ONLY SCORE CHECKED	sco	ORE ENTERED		

## **Belayed Speed Climb**

Standard Event Run Time: 5 minutes

This Judges' Quick Reference Guide is intended to help guide conversation prior to the event. It is not a substitute for reading the Rule Book.

Please use this guide as you review the event with the judging team to ensure consistency across competitors and events.

#### Setup Changes

- The setup team may choose to add tape to certain branches that could break should a competitor
  touch beyond a designated point. If needed, add tape and inform competitors of the potential for a
  penalty or disqualification during the walkthrough.
- Prior to the start of the competition, the event team shall perform a number of trial runs of the event
  with climbers comparable to those who will be competing. If a good time is expected to be 30 seconds
  or less, inform the scoring team to change the time points to 1 second/point (like the Footlock Event). If
  a good time is expected to be greater than 30 seconds, then 2 seconds/point will be used (the default
  in the scoring program). If a 1 second/point system is used, inform the competitors during the
  walkthrough. This decision shall be made by the Event Head Judge.

#### **Rule Changes**

1.1.6— It is each competitor's responsibility to enter the arena with the required equipment stipulated
for each event. Once time event time has started, no additional equipment can be brought in to the
arena. Failure to abide by this rule will result in disqualification from that event.

#### **Scoring Guidelines**

- Event Head Judges should announce if they are giving a penalty where repeat offense may result in a disqualification.
- This event is based purely on time.
- Competitors need to be within 40 seconds (20 seconds if 1 second/point) of the fastest time to score
  points in this event.

#### Reminders

- This event requires three (3) or five (5) timers.
- Make sure to always enter scores on the scoresheet from Timer A to E. Do not skip boxes. If a stopwatch malfunctions, put a line through the boxes so the scoring team knows to ignore that box.

	PENALTY	DISQUALIFICATION
	Touching the branch	Second infraction of using the lead of the rope to
	beyond the tape.	advance position.
MANDATORY		<ul> <li>Dropping a piece of equipment.</li> </ul>
		Failure to remain tied in.
		<ul> <li>Being more than 5 minutes late for event.</li> </ul>
		Misconduct.
		<ul> <li>Second infraction of touching a branch beyond</li> </ul>
		the tape.
		<ul> <li>Failure to be equipped with all required</li> </ul>
		equipment once event time has started.
		Dangerous uncontrolled swing.
		<ul> <li>Leaping or jumping, creating excessive slack.</li> </ul>
DISCRETIONARY	None	<ul> <li>Breaking of a sizable branch (size to be</li> </ul>
		determined by the Event Head Judge prior to the event).

# INTERNATIONAL TREE CLIMBING CHAMPIONSHIP BELAYED SPEED CLIMB

	2018
REQUIRED EQUIPMENT  Approved Eye Protection  Approved Climbing-Style Helmet  Appropriate Footwear  Approved Climbing Harness  Appropriate Clothing	Climber Name / Number:
<b>PENALTY:</b> A 1-second penalty will be deduthe competitor's final score for touching beyond A second infraction will result in a DQ.	ucted from the tape.
COMPETITOR'S TIME  A  MIN SEC 1/100	<b>B</b> MIN SEC 1/100
MIN SEC 1/100	D MIN SEC 1/100
MIN SEC 1/100	
Average time (plus penalty)	MIN SEC 1/100
REASON FOR DQ:	
SCORER USE ONLY SCORE CHECKED	SCORE ENTERED

#### Ascent Event

#### Standard Event Run Time: 4 minutes

This Judges' Quick Reference Guide is intended to help guide conversation prior to the event. It is not a substitute for reading the Rule Book. Please use this guide as you review the event with the judging team to ensure consistency across competitors and events.

#### Setup

- Two main attachment points are required for this event: one for the haul line and one for the belay
  line. The haul line, which will be used for the competitors' ascent line, shall be set up as a lowerable
  system, per Appendix 7. Redirects may be required to keep the two lines from interfering with the
  event. It is advisable to build in additional friction above the haul system to minimize the load on
  the lowering device.
- The ascent can be 12 to 25 meters in height. Measure the final height and communicate this to the competitors during the walkthrough.

#### Rule Changes

- Significant changes were made to the Ascent Event. Review Section 7 for the revised rules.
- 1.1.6—It is each competitor's responsibility to enter the arena with the required equipment stipulated for each event. Once event time has started, no additional equipment can be brought in to the arena. Failure to abide by this rule will result in disqualification from that event.
- System Backup—An additional device or configuration used to back up an approved, primary
  ascending system. System backups may be attached to the same climbing line as the primary
  ascending system (e.g., rope grab, mechanical ascender, six=coiled Prusik, or other accepted
  device) or to a second climbing line (e.g., mobile fall-arrester). Both climbing lines are attached to
  the same anchor point.
- Stowed—Secured, connected, and not loose, to eliminate the possibility of falling and to minimize
  excessive swing.

### Scoring Guidelines

- Event Head Judges should announce if they are giving a penalty where repeat offense may result
  in a disqualification.
- Record all three times on the scoresheet for the three sections of the event.
- Only award setup points if setup is successful (system holds and safety components are attached).
- If changes are made to the ascent system after evaluation, the competitor forfeits his/her setup time
- Only award changeover points if descent system is attached correctly and no components remain that may hinder descent.
- Award two additional points to competitors who incorporate a system backup in an ascent system.

#### PENALTY DISQUALIFICATION Tampering or interfering with components of A second mandatory penalty. MANDATORY fall-protection equipment. Dropping a piece of equipment while working aloft. Preventing correct function of mechanical Failure to remain tied in. Being more than 5 minutes late for event. Placing hands above a footlock Prusik. Misconduct. Misconfigured or detached life-support Failure to be equipped with all equipment once components. event time has started.

## INTERNATIONAL TREE CLIMBING CHAMPIONSHIP ASCENT EVENT

Approved Climbing-Style Helmet Approved A Appropriate Footwear Approved De	scent System	limber Name / Number:		Group:
	FOR HEAD TEC	URING GEAR INSPE HNICIAN USE ONLY to confirm system d		
ASCENT SYSTEM		DESCENT SYSTEM		
RECORD ALL TIMES If time exceeds 89.99 seconds, mark to If a system is misconfigured, mark	he Timed Out bo		y be accumulated	after that section.
SETUP SEC 1/100	A	SCENT SEC 1/100	CHA	NGEOVER SEC 1/100
C :		TIMED OUT		OUT POINTS LOST DUE TO NNFIGURATION
TIME POINTS FOR SETUP AND CHANGEOVER       9.99 seconds or less     3       10.00 to 24.99 seconds     2       25.00 to 44.99 seconds     1       45.00 or 89.99 seconds     0	BONUS POINTS Incorporatio	n of System Backup	0 +2	+ BONUS POINTS
PENALTY POINTS  Tampering or interfering with components of fall-protection equipment Preventing correct function of mechanical device Placing hands above a footlock Prusik Misconfigured or detached life-support components				
REASON FOR DQ:  SCORER USE ONLY  SCORE CHECKEI		SCORE ENI		PRELIMINARY

## Masters' Challenge

#### Standard Event Run Time: 25-35 minutes

This Judges' Quick Reference Guide is intended to help quide conversation prior to the event. It is not a substitute for reading the Rule Book. Please use this guide as you review the event with the judging team to ensure consistency across competitors and events.

#### **Setup Changes**

- Prior to the start of the event, work with the Head Technician and the Tree Technician to determine the maximum height allowable for a single and double load. They do not need to be marked, but should be discussed ahead of time.
- The initial setup of the event shall be performed by climbing and not solely with an aerial lift. Climbing will help the judges pre-determine potential tie-ins, inspect for defects, and evaluate rope angles based on placement of the stations.

- 1.1.6—It is each competitor's responsibility to enter the arena with the required equipment stipulated for each event. Once event time has started, no additional equipment can be brought in to the arena. Failure to abide by this rule will result in disqualification from that event.
- 8.2.19, 8.2.20 Look for changes in audible requirements.

- Event Head Judges should announce if they are giving a penalty where repeat offense may result in a disqualification.
- Scoring points shall be the same for all judges. These are the double-lined boxes on the scoresheet.

- This event requires three (3) or five (5) judges.
- 8.2.17 A competitor who utilizes more than five throws to install a throwline receives no height points.
- A competitor receives points only for tasks that were completed within the time limit. If the competitor times out, s/he can receive points, at the judges' discretion, in any of the scoring sections, even if all the tasks pertinent to that section have not been completed.

	PENALTY	DISQUALIFICATION
MANDATORY	Failing to retrieve all equipment within the time limit. (20 points) Failure to issue an audible warning before throwing or removing a throw weight (includes mechanical devices). (1 point) Failure to issue an audible warning when necessary while aloft. (3 points)	Dropping a piece of equipment while working aloft. Failure to remain tied in to the tree on at least one point of attachment. Third offense of failure to issue an audible warning prior to throwing or removing a throw weight. Second offense of failure to issue an audible warning when necessary while aloft. Two throws (throwlines with weights attached or climbing lines) that land outside the flagged area. More than 5 minutes late for event. Misconduct. Leaving the predesignated area or bringing in equipment from outside the predesignated area once the official time has begun. Placing handsaw in the mouth. Breaking of sizable branch. A second discretionary penalty (as determined by Event Head Judge). Failure to be equipped with all required equipment once event time has started.
DISCRETIONARY	Unsafe acts, poor performance, poor techniques (assessed by Scoring Judges). Dangerous uncontrolled swing. Failure to maintain a taut climbing system or climbing above the tie-in point. High-speed or dangerous movement.	None  None  Scoring Guidelines (for limb tass) — all judges shall garee. Other Scoring Guidelines

#### Exceptional performance 9-10

7-8	Good performance	8 – Hit target second throw
5-6	Adequate performance	6 – Hit target third throw
3-4	Fair performance	4 – Rang bell but did not hit target
1-2	Poor performance	0 – Did not hit target or ring bell
0	Unsafe/No performance	

#### <u>Discretionary Scoring Guidelines (for stations)</u> <u>Scoring Guidelines (for limb toss) – all judges shall agree</u> Other Scoring Guidelines 10 - Hit target first throw

3 - Exceptional performance 2 - Good performance

1 - Fair performance

0 - Unsafe/Poor performance

## INTERNATIONAL TREE CLIMBING CHAMPIONSHIP MASTERS' CHALLENGE

REQUIRED EQUIPMENT  Approved Eye Protection Approved Climbing Harness  Approved Climbing-Style Helmet Approved Climbing Line  Appropriate Footwear Approved Handsaw and Scabbard  Appropriate Clothing Approved Work-Positioning Lanyard	
INSTALLATION OF CLIMBING LINE (18 Points possible) FOR	BOXES-JUDGES SHALL ALL AWARD THE SAME POINTS SCORE
Throwline  1st try 2nd try 3rd try 4th try 5th try 6th try  10 8 6 4 2 0 5 4 3 2	I I
SET UP OF CLIMBING LINE / EQUIPMENT / ENTRY INTO TREE (15 Points possible - enter 0, 1, 2, or 3 in each box)	
SET UP: ENTRY:	C SCORE
Visual Tree Assessment Metho	d: Suitable, safe, always secure
Installation of Climbing Line / Equipment Ascer	t: Smooth, fluid, efficient use of energy
Safe and Efficient Set up	
A) Maintain proper tension in the fall-protection or work-positioning system  B) Rope management  C) Tie-in point or re-direct suitable for situation and work station  D) Confident posture and balance at station  E) Overall work plan, selection of route, control of movement to and from station	ndsaw 2 Limb Toss Plumb Bob  + + - + - = SCORE
F) Correctly completed station JUDGES SHALL ALL AWARD THE SAME POINTS 0 or 10	O or 10 0, 4, 6, 8, 10 0 or 4, 7, 10
DESCENT, LANDING, RETRIEVAL OF EQUIPMENT (12 Points pos	ssible - enter 0, 1, 2, or 3 in each box)
Well-planned descent, rope control, not tangling lines	Smooth gear retrieval, done without struggle
Proper descent speed, smooth descent, balanced landing Safe / Controlled gear retrieval	
JUDGE'S DISCRETIONARY BONUS POINTS (15 Points possible - enter 0 thru 5 per box)	
Overall demonstration of skill, style and presentation	SCORE
Use of innovative techniques and equipment	
Overall safe work practices and techniques	
PENALTIES Scoring Judge's Discretionary Penalties for Unsafe acts, Poor Performance, or Technique (0 THRU -5)  PENALTIES Head Judge's Discretionary Penalties for Unsafe Acts	
Mandatory Penalty for failing to remove all equipment from tree	0 -20
Mantadory Penalty for failing to issue an audible warning when nece	ssary while aloft 0 -3 DQ
Mandatory Penalty for failure to issue an audible warning while throwing from the ground 0 -1 -2 0	
REASON FOR DQ: OFFICIAL M	
	: TOTAL SCORE (300 points MAX)
SCORER USE ONLY SCORE CHECKED	SCORE ENTERED SCORE ENTERED

# To see the changes made from the 2017 rules, you may view the rules online at:

www.itcc-isa.com/rules

To submit a rule change proposal or to request an interpretation of the rules, visit:

www.itcc-isa.com/ruleschange

You may obtain printable versions of the score sheets and the scoring program at:

www.itcc-isa.com/rules-scoring

Questions or request for approvals regarding equipment go to:

www.itcc-isa.com/equipmentapproval



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