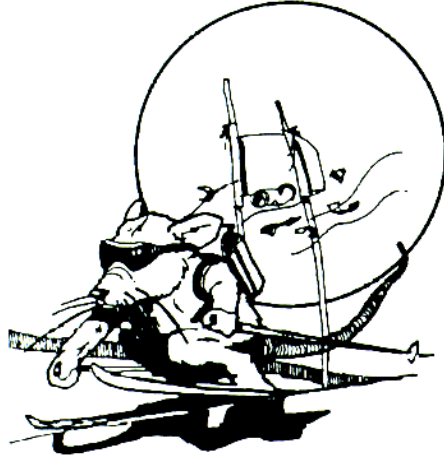


Operations Manual Of



Pacific Northwest Area Clubs Recreational Alpine Teams (PACRAT)

May 8, 2019

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1. PACRAT LEAGUE RULES
Revised as of November 14, 2013

I. Eligibility

- A. In order to compete on behalf of a member club's team in any PACRAT competition, a person must satisfy the following requirements:
1. Be at least eighteen (18) years of age on the date of the first scheduled race.
 2. Be a member in good standing of a NWSCC club at least two weeks prior to the date of the first scheduled event. It is the responsibility of the club's Race Chairperson to verify that all participants representing his or her club are qualified members.
 3. Persons not eligible to participate are current full-time ski/snowboard instructors, paid ski patrol members, current pro racers, national and NORAM team members, or others who are paid as a result of their skiing/snowboarding ability. Any exceptions can only be approved by the PACRAT Board.
 4. A racer may belong to one PACRAT team only.
 5. A racer may use skis, telemark skis, a mono-ski, or a snowboard on the race course during a race event.
 6. A racer must use one type of board for the entire season – i.e. use skis or a snowboard for all races. A racer may not switch between skis, telemark skis, a mono-ski, or a snowboard during the season. The Board may adjust scores as it deems appropriate if a racer switches between skis, telemark skis, a mono-ski, or a snowboard during the season.
 7. A racer must wear a snow sport specific helmet.

II. Teams

- A. Each club may enter an unlimited number of teams made up of eligible members of their club. However, it may be necessary to limit the total number of teams in the league. If so, teams will be accepted on a first paid basis.
- B. Each team shall consist of up to ten (10) members.
- C. Participants must be registered prior to their first race. Teams may add team members if the team is not full. Teams may replace a team member who has not yet raced. In “extreme cases”, requests to replace a team member who has already raced may be brought before the Board for consideration. In the event an extreme case replacement is approved, the team will forfeit any points accumulated by the team member who is being replaced.

- D. Each racer will be assigned their own individual bib number for the season.

III. Classification

- A. There shall be seven (7) classes for men and seven (7) classes for women: Beginner, Novice, Intermediate, Advanced Intermediate, Advanced, Expert, and Elite. Efforts will be made to establish class sizes no smaller than 10 racers and no greater than 25 racers. However, once established, the class barriers (see section V.A.) shall not be changed for the remainder of the season. Class barriers may be revised at the beginning of each season, but not during the season.
- B. Racers will be initially (their first race of the season) placed in the class in which they last qualified and all downstrikes and upstrikes start anew with the first race of the season. Racers with no prior PACRAT participation will be initially classified by the results of their first race. The Board is empowered to adjust any racer's classification consistent with the interests of PACRAT racing.
- C. Upgrading and Downgrading of Racers
 - 1. General: These provisions are intended to prevent the under or over classification of racers, as well as provide an automatic upgrading or downgrading system that will keep the racer's classification in line with his or her progress in racing.
 - 2. Strike System: Racers whose handicaps exceed their class barrier shall receive an "upstrike." Racers whose handicaps fall below their class barrier shall receive a "downstrike."
 - 3. Upgrading by Strike System: On the day that a racer collects an "upstrike," they will retain the same class status and be eligible for any points awarded in that class for that race. The racer will then be upgraded to the appropriate class, based on the racer's handicap, for the next race. Racers will be scored in this manner for moving up a maximum of two classes (two "upstrikes") during a season. If, during the season, a racer moves up more than two classes (three or more "upstrikes"), for races where the third (or more) "upstrike" occurs they will be moved to the higher class for that race and be eligible for any points awarded in the new class.
 - 4. Downgrading by strike system: When a racer collects two "downstrikes" in consecutive finished races in the same class, the racer shall be placed in the next lower classification for the next race. If a racer's handicap is more than one class lower than the racer's existing class, they will receive a "downstrike", but will not be eligible for bonus points if a second consecutive "downstrike" is obtained. A racer that is disqualified (DQ), does not finish (DNF), or does not start (DNS) shall not receive a "downstrike" and said race shall not be included in the consecutive count.

IV. Points Scoring System

A. Team points shall be awarded based on placement within a class, handicap improvement and participation.

1. Placement Points: Placement point distribution is based on two premises; i) each class winner will receive 10 points, and ii) 50% of the starters in each class will be awarded placement points, rounding down for an odd number of starters (i.e. a class with 5 starters receives placement points for 2 racers that finish). The lowest available placement points will be 2 as each participant will receive at least 1 point for each race started (see 3 below). Thus, with a class of 18 starters, placement points are available to the top 9 finishers with places 1 through 9 receiving 10-9-8-7-6-5-4-3-2 points. The placement point matrix that follows is constructed so that statistically each racer in a class with over 3 starters will have an equal chance of scoring three points (i.e. if there are 18 starters the total available placement points equal $10+9+8+7+6+5+4+3+2=54$ divided by 18 starters equals 3). Should a class have two to three starters, 10 points will be awarded to the winner of the class if the racer finishes.

		Number of Starters in a Class																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
2		-	-	-	2	5	6	7	7	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9
3		-	-	-	-	2	4	5	6	6	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8
4		-	-	-	-	-	-	2	3	4	5	5	6	6	6	7	7	7	7	7	7	7	7	7	7	8
P	5	-	-	-	-	-	-	-	-	2	3	4	4	5	5	5	6	6	6	6	6	6	7	7	7	7
L	6	-	-	-	-	-	-	-	-	-	-	2	3	3	4	4	5	5	5	6	6	6	6	6	6	6
A	7	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	4	4	5	5	5	5	6	6	6	6
C	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	4	4	5	5	5	5	5	5
E	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	4	4	4	4	5	5
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	4	4	4
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	3	4
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		Number of Starters in a Class																											
		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50			
1		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
2		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
3		8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
4		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
5		7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
6		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
7		6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
8		5	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
9		5	5	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7		
P	10	4	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
L	11	4	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6		
A	12	3	3	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
C	13	2	3	3	3	3	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
E	14	-	-	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	15	-	-	-	-	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	16	-	-	-	-	-	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	17	-	-	-	-	-	-	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	18	-	-	-	-	-	-	-	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	19	-	-	-	-	-	-	-	-	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
	20	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	3	3	3	3	3	3	3	3	3	3	3		
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	3	3	3	3	3	3	3	3	3		
	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	3	3	3	3	3	3	3		
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	3	3	3	3	3		
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3	3	3	3		
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

In the event of a tie, the highest number of placement points is granted to all the tied racers and the subsequent racer will receive placement points consistent with that racers place (i.e. in an 18 starters class 10 9 8_8 6 5_5_5 2).

2. Handicap Improvement Points: Three points shall be awarded for improving upon the racer's best race handicap of the season.
3. Participation Points: One point is earned for starting a race unless that racer earns placement points.
4. One race will be dropped for each racer in determining the final standings. (i.e. If five races are held, four of five race scores will be used.)

V. Handicap System

A. Class Barriers:

Class	Men's Handicaps*	Women's Handicaps*
Beginner	65.1 or greater	100.1 or greater
Novice	50.1 to 65.0	80.1 to 100.0
Intermediate	40.1 to 50.0	60.1 to 80.0
Advanced Intermediate	27.6 to 40.0	45.1 to 60.0
Advanced	20.1 to 27.5	35.1 to 45.0
Expert	12.6 to 20.0	25.1 to 35.0
Elite	0.0 to 12.5	0.0 to 25.0

*See Exhibit A for method of calculating handicaps

- B. A racer's handicap (HR) is a number, computed as provided in the League Rules, which express the percentage by which the racer's time in a particular race exceeds the theoretical time that a racer with zero handicap points would ski the course.
- C. The time of a racer using a snowboard or telemark skis shall be adjusted downward by 20% and 13%, respectively, prior to calculation of their handicap (i.e. a snowboarder whose time is 50.0 will be adjusted to 40.0 (50.0 x 80%)). The adjustment factors were established by NASTAR as the difference between top skiers and snowboarders/telemarkers.

VII. Race Operations

A. Start Order

1. Members race together as a team, one following the other or at the discretion of the starter. Team captains shall be responsible for monitoring the progress of the race and shall make sure that their team is ready to race in their designated start order.
 - a. Racers are responsible for choosing and remembering which course they run first and they must race in the opposite course for their second run, unless told otherwise by the PACRAT Chair, or his/her designee.

2. First race of season: The team starting order shall be determined by the Board by random draw of eligible teams entered.
 3. Subsequent races: For races between the first and last races, the starting order established for the first race shall be used as a base to move teams between start groups and within start groups so that teams rotate through the start order throughout the season. For the last race of the season, the starting order shall be determined by the current Team Standings in the League; the last place team shall race first, the second to the last place team shall race second, etc. and the first place team shall race last.
 4. Missed starts: If a racer misses his/her team's starting time:
First run - may be taken following the completion of all teams' first runs. If second runs are in progress, the racer shall be entitled to one run only with his/her team at the scheduled second run time.
Second run - if racer made the first run, the second run may be taken following completion of all teams' second runs.
 5. The course will close at the discretion of the Race Director or his/her designee.
 6. The PACRAT Chair or his/her designee will act as chief starter. The chief starter is empowered to determine team/individual racer start order within his/her discretion consistent with the objectives of PACRAT racing.
- B. Disqualification will result from the following:
1. Missing a gate: Not going through each gate with both feet and with both skis attached. Exception: both feet with one ski attached allowed through the final two gates (including the finish gate).
 2. Loss of a ski or board, except in the last two gates. Unless hurt, the racer shall move to the side of the course to put ski(s) or board back on to avoid interfering with the next racer. Racers are not to complete the run putting ski(s), snowboard or mono-ski back on.
 3. Receiving physical assistance during the race.
 4. Any person found wearing another's bib or racing when ineligible may be subject to disqualification.
- C. Disqualification for the day or remaining race season may result from:
1. Skiing/boarding through any two gates prior to the race.
 2. Skiing/boarding along the edge of the course for the purpose of practicing the line or terrain features (shadowing).

3. Unsportsmanlike conduct or language.
4. Racer fails to let an overtaking racer pass on first demand in the case of two racers on the course simultaneously.
5. Not signing individual race entry release form.
6. Refusal to do share of work on the race, if requested, including course slipping.
7. Failure to have race bib visible while racing the course.
8. Any other act not consistent with the objectives of PACRAT.

D. Disqualification Process

1. Disqualification of a racer shall be determined by the Board.
2. In the event that both a disqualifying action and timing malfunction occur in the same run, the disqualifying action takes precedence.
3. Protests must be reported to a board member within 48 hours of the end of the subject race. The Board may authorize an extension of the protest period.
4. Disqualifications may be appealed to the Board.

E. Re-runs: All re-runs will be allowed as soon as feasible following completion of the team currently on course. Re-runs will be permitted for the following:

1. False start: A false start is declared if the starter calls back the racer before he passes through the second gate.
2. Timer malfunction.
3. Interference by racer or transient skier. If the racer claims interference during a run, a re-run may be permitted; however, final acceptance of the re-run will be at the discretion of the Board.

F. Shortening Race to One Run: At the discretion of the PACRAT Chair, or his/her designee, in consultation with the Board, as available, a race may be shortened to a one run race (each racer is limited to one counting run). Every consideration will be made to have a two run race; however, weather, unsafe snow/course conditions, unforeseen lengthy delays, etc. could impact the ability to complete two runs. If a race is changed to a one run race:

1. If a one run race is called before the race starts only one run will be allowed unless there is a re-run situation (i.e. interference, timing issues). A second run will not be granted to any racer who DQs, DNFs.

2. If the race has started before being changed to a one run race:
 - a. Only the first run time will count for any racers completing two runs. The second run time will count if a racer DQs or DNFs the first run.
 - b. Racers will be allowed a second run in a re-run situation (i.e. interference, timing issues).
 - c. Racers will be allowed a “make-up” run at the end of the first run (or when the one run race determination is made if second runs have started) if they DQ or DNF on their first run in order to establish a time for the race. The “make-up” run shall be on the opposite course from which the first run was taken. If the opposite course is deemed unsafe by the PACRAT Chair, or his/her designee, in consultation with the Board, as available, the “make-up” run shall be on the same course as previously run. A DQ or DNF on the “make-up” run will count as the final result for that racer. It is the racer’s responsibility to know of and be on time for any “make-up” runs.
 3. The Board is empowered to revoke the “make-up” provision above for any racer who is deemed to have purposely skied off course to avoid a finish.
- G. Postponements: Postponement of a race will be decided by the PACRAT Chair, or his/her designee, in consultation with the Board.
- H. Official Results: The race results will be declared official after the Board has:
1. Acted upon all protests, disqualifications, and injuries; and
 2. Approved the results as compiled and presented.

EXHIBIT A

HANDICAP CALCULATION

The following methods will be used to calculate individual racers handicaps, using the statistical approach used by the Recreational Race Leagues in other regions of the United States.

ZPT = Zero Par Time (Theoretical fastest possible time on the course)

TP = Pacesetters Time

HP = Pacesetters Handicap

HR = Racer's Handicap

HC = Class Handicap Cutoff Time

TR = Racers Time

TC = Class Cutoff Time

$ZPT = TP / (1 + (.01 * HP))$

$HR = 100 (TR - ZPT) / ZPT$

$TC = ZPT * (.01 * HC)$

$HC = ZPT + ((ZPT * Handicap) / 100)$

ZPT will be calculated for all Pacesetters. The course ZPT will be the average of the tightest cluster of ZPTs.

2. PACRAT DIRECTOR DUTIES

Revised as of May 13 , 2013

The directors of PACRAT shall perform such duties and functions as shall be within the designation of their respective offices as well as such additional duties and functions as may be assigned, from time to time, by the Board. The following list specific duties each Director is in charge of. Duties may be assigned to others directors if said director's skill set is more in line with said duty.

I. Chair

- A. Arrange for and preside over board meetings.
- B. Conduct Team Captain's meeting on race day.
- C. Arrange and conduct the Team Captain's kick-off meeting.
- D. Arrange race dates with resorts.
- E. Negotiate all race contracts, releases, and arrange for insurance for PACRAT.
- F. Obtain and distribute "Comp" tickets, if any.
- G. In charge of race day duties of all directors and volunteers.
- H. In consultation with other board members, makes final call on the cancellation of any race.
- I. Attend NWSCC meetings.
- J. Signer on bank accounts.
- K. On hill duties as needed.

II. Vice-Chair

- A. Order race bibs.
- B. Procure trophies and pins.
- C. If owned, in charge of PACRAT radios.
- D. Oversee race day sign-ups.
- E. Distribute pins after races.
- F. Signer on bank accounts.
- G. On hill duties as needed.

III. Race Director

- A. Arrange for course set-up with resort.
- B. Oversees course set-up/configuration.
- C. If owned by PACRAT, in charge of timing equipment set-up.
- D. Decides race course open and close times.
- E. Final decision maker with regard to course maintenance.
- F. On hill duties as needed.

IV. Results Director

- A. Maintains PACRAT computer and race database.
- B. Distributes start order sheet for next race.
- C. If owned by PACRAT, in charge of timing equipment operation.
- D. Records racer times.
- E. Established course PAR time and calculates results and points.
- F. Distributes race results.
- G. Compiles Far West Racing Association (FWRA) and any other race computations.

- H. On hill duties as needed.

V. Secretary

- A. Record and distribute meeting minutes.
- B. Maintain PACRAT Bylaws and Operations Manual.
- C. Oversees the website, communication between PACRAT members and the Board, communication between the board and the team captains and communication among the board (agendas, minutes, meeting notices etc.).
- D. Signer on bank accounts.
- E. On hill duties as needed.

VI. Treasurer

- A. Maintain PACRAT's banking accounts.
- B. Produce an annual budget.
- C. Produce tax returns, if needed.
- D. Provide financial information to NWSCC in a timely manner.
- E. Signer on bank accounts.
- F. On hill duties as needed.

VII. Membership Director

- A. Promote PACRAT to NWSCC clubs.
- B. Oversees PACRAT presence at the Ski shows in the Portland area.
- C. Develops and oversees other programs to bring PACRAT racing to other skiers.
- D. On hill duties as needed.

VIII. Party Director

- A. Arrange and promote various parties during the year. Any contracts shall be approved by the Chair or the Board prior to signing.
- B. Coordinate check-in of party participants.
- C. Arrange for a Master of Ceremony/Announcer (if necessary).
- D. On hill duties as needed.

IX. Sponsorship Director

- A. Working within NWSCC parameters, obtain possible sponsorship of PACRAT by local businesses.
- B. Make sure advertising banners are set up at the various PACRAT events.
- C. Purchase/obtain door prizes for PACRAT events.
- D. On hill duties as needed.

X. Past Chairman

- A. Advise the Chair and the Board as necessary.
- B. On hill duties as needed.

XI. Director at Large – Rat Patrol Coordinator

- A. In charge of and supervises all Rat Patrol functions.
- B. In charge of the recruitment of others to help set up, maintain, and tear down the race course.
- B. On hill duties as needed.

XII. Director at Large – General

- A. Provide assistance as directed by the Board.
- B. On hill duties as needed.