# Welcome to the 34<sup>th</sup> Annual Chelan XC Classic and US National Open Distance Championships

# Sponsored by:

Cloudbase Country Club Chelan Flyers Northwest Paragliding Club

# **Meet Officials:**

Meet Organizer: Lori Lawson Meet Director: Lenny Baron Score Keeper: Aaron Rinn Safety Director: Tom Johns

# Thank you to the following for supporting the 2015 Chelan XC Classic:

USHPA KOZI Radio Lake Chelan Washington State Department of Natural Resources (DNR) Chelan County Public Utility District Chelan Public Schools District 7 Seas Screen Printing

# **Special Thanks to:**

Larry Majchrzak Kevin Baron Rich Harman George and CJ Sturtevant

#### SCHEDULE OF EVENTS

# Saturday June 27<sup>th</sup>

Chelan Falls Park Soccer Field LZ/Pavillion 5:00 pm . Pilot Registration & GPS Uploads 7:00 pm . Meet Orientation (optional attendance)

# Sunday June 28<sup>th</sup>

Meet Headquarters 8:00 am to 10:00 am . Pilot Registration Chelan Butte 11:00 am . PilotsqMeeting

# Daily June 28<sup>th</sup> – July 3<sup>th</sup>

**Chelan Butte** 

11:00 am . PilotsqMeeting

# Friday July 3<sup>th</sup>

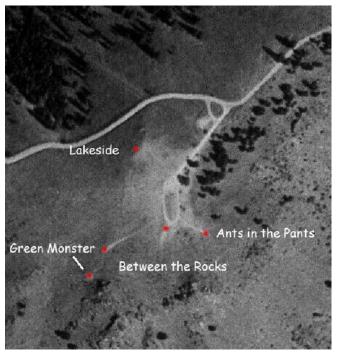
Chelan Falls Park Soccer Field LZ/Pavilion (Pilots - turn in your GPS at the Pavilion) 7:00 pm . BBQ (non-competitors: \$10/adult, \$5/child) 9:00 pm . Awards Ceremony

GPS turn in for scoring and daily track log downloads will take place at Meet Headquarters:

2327 W High St. Chelan, WA 98816 509-682-0479

#### **CHELAN BUTTE ORIENTATION**

Washington State Discovery Pass is required in all vehicles on Chelan Butte.



## LAUNCHES

The primary launches are on the lower south plateau of the Butte at 3,700qMSL.

The east launch, known as **"Ants in the Pants"**, is a good steep launch into a southeast facing bowl.

The south launch, "**Between the Rocks**", is used when the sun has heated up the southern side of the Butte. Itos a relatively flat slope launch, so a strong, constantly accelerating run in required. Continue flying with some speed until past the two rock outcroppings and over the edge of the Butte.

The southwest facing launch is called the "Green Monster". The top part is shallow and pilots have been known to launch twice there. This launch is used when the winds are blowing strongly up the Columbia River.

The upper launches (near tower) are closed during the meet per the DNR-use agreement.



# LANDING ZONES

**Junk Yard:** 1,200qMSL. The LZ is a grassy field with power lines on the east side of the field. LZ can be turbulent in the afternoon. Do not drive on the grass . hot cars start fires! Please park carefully on the side of the road to avoid obstructing through traffic.

**Chelan Falls Park Soccer Field:** 800qMSL. The green grass field is near the western shore of the Columbia River. The LZ has a narrow landing approach with trees, buildings, and large power lines to the north. Strive to land in the center of the field.

# 0. INTRODUCTION

- **0.a.** <u>One Meet Two Contests</u>: For 2015 two simultaneous contests will be conducted . the Chelan Cross Country Classic and the US National Open Distance Championships. All competing pilots are automatically entered into both contests. The scoring methods and glider division breakouts between the two are different and may result in different winners and placements. Awards will be provided for both contests.
- **0.b.** <u>Divisions:</u> The Chelan Classic rules allow many glider class types and scores the pilotsq competing within the different classes (see Rule 6.k). The US National Open Distance Championships combine the glider classes within the Hang Gliding category and combine the glider classes within Paragliding category using glider performance multipliers in the scoring calculations (see Rule 8.c). The US National Open Distance Championships provides separate, Ment and Woment sub-categories for both Hang Gliding and Paragliding categories.
- **0.c.** <u>Scoring:</u> The Chelan Classic contest will be scored using the heritage Classic Rules (see Section 6) and the best four days of each pilotos scores will be used to determine his/her final score. The US Open Distance Championships will be scored using the rules derived from the USHPA Open Distance Competition Rulebook (see Section 8) and all valid flight days (up to six) will be used for scoring.
- **0.d.** Overall conduct of the meet: With exception to the divisions and the scoring, the conduct of both contests will be per the heritage Chelan Classic Rules. For example, restricted air space and areas, the launch protocol, flight distance calculations, valid triangle determination, track log submission, waypoint verification and adherence to the rules.
- **0.e.** <u>USHPA Sanctioned Event:</u> The US Nationals Open Distance Championships is a USHPA sanctioned competition. Ranking Points (RP) will be used to determine the contest winners. The RP results will also be submitted to USHPA for purposes of determining the National Series Championships rankings.

### 1. SAFETY

- **1.a.** <u>Fire Safety</u>: A 10BC rated fire extinguisher and a fire shovel are required for every gliding support vehicle going up Chelan Butte. Smoking is not permitted while on the road up the mountain or at any other time while on Chelan Butte. This is a condition of our permit with the Washington State Department of Natural Resources.
- **1.b.** <u>Set-up</u>: Turbulent dust devils regularly rip through the glider set-up and launch areas. All hang gliders must be tied down to the steel cables or steel anchors located throughout the setup area. Do not leave an untethered glider unattended or a paraglider laid out.
- **1.c.** <u>Launches</u>: All launches on the Butte can be unforgiving of a slow or otherwise poorly executed takeoff. Launch aggressively and keep a safe margin of airspeed at all times.

- **1.d.** <u>**Turn Direction**</u>: Good thermal etiquette is strongly encouraged at all times, including awareness of various types of wings in the same thermal and a wide range of pilot skill and experience. The designated turn direction for every day of the meet, for all pilots within one mile from launch will be LEFT-HAND.
- **1.e.** <u>Conditions</u>: Launching and flying conditions are at the discretion of the pilot. However, the Meet Director and the Safety Director may call a Non-Contest Day.
- **1.f.** <u>Landings</u>: Participants must not land in planted wheat, other crops, or orchards. Active fields are typically green or yellow. Plenty of fallow or uncultivated land is available. Pilots who land in crops will be responsible for paying the land owner for crop damages, and will receive a zero score for the day.
- **1.g.** <u>Vehicles</u>: Vehicles must stay on the road or in designated parking areas. Please help control the dust by keeping speeds down. Breaking speed limit laws may result in pilot penalties or disqualification for the day.
- **1.h.** <u>Restricted Airspace and Areas</u>: All flights MUST comply with FAA regulations including airspace restrictions to be valid and receive a score. It is the pilot's responsibility to know and obey airspace regulations. Please review applicable airspace and property restrictions prior to flight. Such restrictions include the following:
  - a) Canada (due to US and Canadian airspace and customs regulations)
  - b) Spokane/Fairchild Class C
  - c) Grant County International Airport (Moses Lake) Class D
  - d) Pangborn (Wenatchee) Class E
  - e) Yakima Training Center (US Army Firing Range)
  - f) US Department of Energy . Hanford Site
  - g) Columbia River Hydro-Electric Dams

A current Seattle Sectional chart will be provided. Free downloads of current charts are available on the web (example: <u>http://skyvector.com/</u>). Any pilot violating this rule will receive a zero score for the day. Even worse, the pilot may be subject to criminal charges.

# 2. GLIDERS AND EQUIPMENT

- **2.a.** <u>Airworthiness</u>: Each pilot is responsible for maintaining the airworthiness of his/her aircraft and determining its suitability for flying in this meet. The Meet Director reserves the right to prevent the launching of a glider or equipment deemed to be non-airworthy.
- **2.b.** <u>Helmet and Parachute</u>: All pilots must wear a helmet and have a reserve parachute when flying.
- **2.c.** <u>**Radios**</u>: Pilots utilizing FM, USHPA band, VHF, or any other radio equipment that requires a license for the operator or the station must have that license.

### 3. PILOTS

- **3.a.** <u>Insurance</u>: All pilots flying the Butte must carry USHPA personal liability insurance, i.e., they must be USHPA members. Each pilot will be required to show current membership, and each must complete a USHPA Emergency Medical Information form before beginning the competition.
- **3.b.** <u>Ratings</u>: All pilots must have an intermediate rating or higher and be signed off for all special skills applicable to the solo operation of a hang glider or paraglider, including TUR, RLF, XC, and FSL. The Meet Director may waive certain aspects of this requirement.
- **3.c.** <u>Non-Contest Pilots</u>: Pilots who are not entered in the contest will be asked to pay a fee of \$10 per day to help cover meet costs, insurance, toilets, etc. Non-contest pilots are encouraged to use the lesser-used launches.
- **3.d.** <u>Single-Day Pilots</u>: Pilots who wish to compete one day at a time must pay \$20 per day.

### 4. LAUNCH

- **4.a.** <u>Corridors</u>: Launches and corridors to the launch area will be marked by surveyors tape. Competitors may neither set up nor situate their gliders in these areas until they are suited up, hooked in, and ready to fly.
- **4.b.** <u>Line</u>: After the launch window opens, the first five pilots who have formed a line in the launch corridors may line up in the launch area behind the take-off point. If a line has formed before the launch window opens, the Launch Director will confirm that these pilots are the first five.
- **4.c.** <u>Order</u>: The Launch Director will determine the launch order before and after the launch window opens based upon the order of pilots in the launch corridor line. If there are more pilots who wish to be in the launch corridor than space allows, the Launch Director will take their pilot numbers to determine further launch order.
- 4.d. <u>Leaving the Line</u>: A pilot may refuse the launch and move aside without penalty. The pilot must ask permission of the pilot he/she will precede before re-entering the launch line. This does not apply if the launch is being %Rushed+.
- **4.e.** <u>Perching</u>: Pilots must launch as quickly as possible while safe conditions exist. The Launch Director reserves the right to ask a pilot to clear the launch in ‰on-Pushing+ situations if the pilot on launch is delaying.
- **4.f.** <u>Non-Contest Pilots</u>: Non-contest pilots may launch before the competition launch window opens and after it closes and at the discretion of the Launch Director.
- **4.g.** <u>Authority</u>: The Launch Director may disallow and prohibit competition launches at any time. Reasons include: unsafe weather conditions, emergency medivac and fire fighting operations.

### 5. PUSHING THE LAUNCH

- **5.a.** <u>Requirements</u>: Pilots may %Rush+the launch only if they are fully suited, hooked in, in the line, and ready to fly. The name of the pilot %Rushing+the launch must be announced at the time of the push.
- **5.b.** <u>The Push</u>: When the launch is being pushed, the pilot at the front of the line will be allowed 30 seconds of uninterrupted safe launching conditions. The pilot at the front of the line may choose to decline and go to the rear of the line as it exists at that time. If the pilot at the front of the line delays beyond the 30-second window, his/her score for the day will be penalized 5% for each 30 seconds of delay while safe launching conditions exist.
- **5.c.** <u>The Pusher</u>: When the pilot who pushed the launch arrives at the front of the line, he/she will have 30 seconds of uninterrupted safe launching conditions to launch. If that period passes, the pilot will receive a score of zero for the day, which will count as one of the four scored days.
- **5.d.** <u>Applicable Launches</u>: % Rushing the Launch+rules will apply only to the primary launch as determined by the Launch Director. Secondary launches with safe conditions may also be available, and operate on a first-come basis.
- **5.e.** <u>Authority</u>: It is up to the Launch Director to determine 30-second windows and penalties assessed. The Launch Director may override a %Rush+in extreme or unsafe conditions.

# 6. CHELAN CROSS COUNTRY CLASSIC SCORING

- **6.a.** <u>Flight Days</u>: A pilot may take as many flights per day as he/she wishes. However, only one flight per day will be scored. Flights on non-contest days will not be scored. The best four days of the six competition days will be used to calculate each pilotos total score.
- **6.b.** <u>Origin</u>: All scoring flights will originate from Chelan Butte and end when the pilot lands. For out-and-return and triangle tasks, Chelan Butte is waypoint #1.
- 6.c. <u>Flight Types</u>: Pilots may fly open distance, out-and-return, or triangle tasks at their individual discretions. Only one task will be scored per flight except as specified in rule 6.m. A valid out-and-return task must include one of the non-LZ approved waypoints (see Table 1). A valid triangle task must include an approved waypoint pair from Table 2 Chelan XC Classic Valid Waypoints.
- 6.d. <u>Mileage Points Awarded</u>: For an open distance task, the pilot is awarded 10 points per mile as measured in a straight line from the Chelan Butte waypoint to the landing point or the highest-scoring track point. For a valid out-and-return task, the pilot is awarded 13 points per **course mile completed**, provided at least half of the return leg is flown. For a valid triangle task, the pilot is awarded 15 points per **course mile completed**, provided at least half of the final leg is flown. If the pilot flies an out-and-return or triangle task and fails to complete at least half of the final leg to a designated LZ, he/she will be awarded 10 points per **course mile completed**. This includes "dogleg" mileage when failing to reach a triangle waypoint #3.

- **6.e.** <u>Dogleg</u>: For attempted out-and-return and triangle tasks where the pilot begins the final leg but does not reach a concluding waypoint, the **course miles completed** equals the total mileage of the entire task, minus the remaining distance along the course as measured to the landing point or the highest-scoring track point.
- 6.f. <u>Concluding Waypoints</u>: The designated LZ waypoints, SOCR07 and JYLZ12, both qualify as concluding waypoints for out-and-return and triangle tasks. If upon return the pilot tags both LZ waypoints, the score is determined by the LZ waypoint which gives the highest score (longest final leg). The pilot may choose to increase **course miles completed** for an out-and-return or triangle task by tagging the Chelan Butte waypoint as a concluding waypoint. The pilot may then land at any one of the designated LZs and receive the LZ bonus.
- **6.g.** <u>LZ Bonus</u>: A 100-point bonus is awarded for landing in a designated LZ at the conclusion of an out-and-return or triangle task. Note: If a designated LZ is unsafe, for any reason, the pilot should elect to land elsewhere.
- 6.h. <u>Highest-Scoring Track Point</u>: Open distance and distance from goal are determined by the highest-scoring track point, which may not necessarily be the landing point. This is to encourage pilots to use the safest available landing areas without loss of mileage. This rule also applies to fly downs to a designated LZ.
- 6.i. <u>GPS Track Logs</u>: Scoring is based on pilotsqGPS track logs. Scoring is automated, and assigns points based on the highest-scoring interpretation of the log. No other forms of verification will be allowed or considered, including photos, verbal descriptions, or eyewitness accounts.
- 6.j. <u>GPS Turn-in</u>: Each pilot must turn in a GPS track prior to 9:00 pm on the day of the flight. If a task of over 100 miles open distance is claimed, the GPS track may be turned in by 9:00 am the next day. After the deadline, the GPS track will not be accepted and no score will be recorded. Please turn in your GPS tracks as early as possible for scoring. Returning pilots may phone in landing location coordinates as long as the call is made prior to 9:00 pm (See Section 9 for the Score Keeperos phone number). Pilots are REQUIRED to check in with the Score Keeper at meet headquarters or by phone at the end of each day, even if the pilot has chosen not to fly that day. This is to ensure that all pilots have returned safely and are accounted for.
- 6.k. <u>Class Types</u>: For competition purposes, pilots are divided into classes based on the type of wing they fly. Hang gliders have four classes: Single Surface, Kingpost, Topless, and Rigid. Paragliders have three classes: Class B (DHV1-2, EN-B), Class C (DHV2, EN-C) and Open Class (above DHV2, above EN-C, CCC).
- 6.I. <u>Single-Entrants</u>: Classes with only one entrant are eliminated and the pilot can compete in the next-closest performance class. A performance factor is applied to the single entrantom daily scores. For hang gliders, Rigid competing in Topless: 0.86; Single Surface competing in Kingpost: 1.25. For paragliders, Class B competing in Class C: 1.04; Open Class competing in Class C: 0.87.

6.m. <u>Called Task</u>: A called-task day may be declared by the Meet Officials. A five-member Task Committee is then selected by the competition pilots. The Task Committee determines an appropriate called task (straight out, out-and-return or triangle) based upon predicted weather conditions, as well as one designated LZ. For a triangle called task, the waypoint order is also specified.

All pilots must attempt the same called task. Course miles will only be calculated for those flights which show the pilots intent to fly the called task. The scoring is the same as in rules 6.d., 6.e. and 6.g. For a triangle or out-and-return, the pilot will be awarded the completed task points for completing more than half of the final leg of the task - same as rule 6.d. - but only as it pertains to the one designated LZ. The task is complete when the pilot tags the finish waypoint of the designated LZ. The pilot may then land in the one designated LZ to receive a LZ bonus per rule 6.g.

Only after completing the called task may the pilot elect to continue the flight and earn more points by attempting a self-directed task. If the called task is a straight-out, the pilot may keep flying for an open-distance flight as measured from Chelan Butte. Also, if the called task is a straight-out, the pilot may use the completed straight-out task as the first leg of an out-and-return or triangle. For a triangle attempt, the pilot must tag an approved waypoint pair (see Table 2). If the called task is an out-and-return or triangle, the pilot must tag the Chelan Butte waypoint to initialize the self-directed task. For all self-directed tasks, all Chelan-area designated LZs are available for the LZ bonus.

### 7. WAYPOINT VERIFICATION

- 7.a. <u>Tagging</u>: Pilots must fly with a GPS and submit a COMPLETE GPS track covering launch to landing for ease of scoring and for safety. At least one GPS track point must be recorded within a waypoint cylinder for it to be considered %agged+. It is the pilotopilot responsibility to make certain his/her GPS is functioning properly and recording in the track log. Please make sure you have charged batteries in your GPS each day.
- **7.b.** <u>Precision</u>: See enclosed waypoint maps and tables for locations and descriptions of valid waypoints. The written descriptions are approximate locations of the waypoints. The precise and official location for each waypoint is listed in terms of latitude and longitude in Table 1. These precise waypoint locations are available for GPS upload at Meet Headquarters.

### 8. US NATIONAL OPEN DISTANCE CHAMPIONSHIPS SCORING

- 8.a. <u>Competition Categories:</u> There will be a maximum of 4 competition categories: Menos Hang Gliding, Womenos Hang Gliding, Menos Paragliding and Womenos Paragliding. A minimum of three competitors are needed for each category.
- 8.b. <u>Valid Flight Days</u>: Days are considered valid flight days for scoring if the following criteria are met: 1) in the opinion of the launch director, all competitors had a reasonable opportunity to launch 2) three competing flights were completed in excess of 10 miles for each competition category.
- 8.c. <u>Scoring Glider Performance Multiplier:</u> Different glider types will compete together using the following multipliers: Hang Gliders: Single Surface: 1.25, Double Surface with Kingpost : 1.00, Topless: 0.81, Rigid: 0.70.
  Paragliders: B Class (DHV1-2, EN-B): 1.20, C Class (DHV2, EN-C): 1.15, Open Class (above DHV2, above EN-C, CCC): 1.0
- 8.d. <u>Scoring Raw Score (RS):</u> The Raw Score is calculated as follows:

RS = (Mileage Points Awarded) / 10) x (Glider Performance Multiplier) x (Pilot Penalties)

Mileage Points Awarded is determined by Rules 6.d, 6.e, 6.f, and 6.h. Note: the LZ Bonus (Rule 6.g.) is not included in the US OD Championships calculations. Pilot Penalties are determined by the Meet Director. See Rules 1.f, 1.g, 1.h, 5.b, 5.c, 9.f

8.e. <u>Scoring – Pilot to Winner Ratio (P/W):</u> The winner of a given day within a given competition category is the pilot and flight which has the highest Raw Score. This pilot receives a Pilot to Winner ratio of 1.0. All pilots will receive their P/W as calculated as follows:

P/W = (Pilotos RS) / (Winneros RS)

8.f. <u>Scoring – Ranking Points (RP):</u> The number of competing pilots within a competition category is determined by the Launch Director and Score Keeper for each day. The Ranking Points are calculated as follows:

RP = (P/W) X (Square Root of the number of competing pilots) X 100

**8.g.** <u>Final Score:</u> The meet champion and the placement of all pilots are determined by the sum of the Ranking Points for each valid day.

# 9. ADHERENCE TO THE RULES

- **9.a.** <u>Signature</u>: By signing the entry form, the pilot signifies his/her willingness to abide by these contest rules.
- **9.b.** <u>Cheating</u>: Any attempt to cheat, such as falsifying a track log, re-launching from a point other than Chelan Butte, or any other means, will result in the immediate disqualification of the pilot from the meet. The pilot will not receive any refund of entry fees.
- **9.c.** <u>Protests</u>: All protests, submitted in writing and accompanied by a \$25.00 protest fee, can be brought to the attention of the Meet Director on the day of the incident or before 10:00 am on the following day. Sustained protests will have the protest fee refunded.
- **9.d.** <u>Harassment</u>: Any pilot, who harasses any of the Meet Officials, as determined by the Meet Director, shall be immediately disqualified, and his/her entry fees forfeited.
- **9.e.** <u>Dangerous Flying</u>: Any pilot, who flies in such a manner as to endanger other pilots, people on the ground, or other users of the airspace, as determined by the Meet Director, shall be immediately disqualified, and their entry fee forfeited. (FAR 103.9 (a))
- **9.f.** <u>Federal Aviation Regulation</u>: Any pilot, who violates any other Federal Aviation Regulation, as determined by the Meet Director, will be disqualified for the day.
- 9.g. <u>Authority</u>: All rulings of the Meet Director shall be final.

# **10. CONTACT INFORMATION**

Meet Headquarters:									
HQ alternative emergency number:									
Lorilawson	425-681-2458								
	425-275-2162								
Aaron Rinn	818-439-1174								
TBD	TBD								
Tom Johns	509-682-0479								
	151.925								
	rgency number: Lori Lawson Lenny Baron Aaron Rinn TBD								

# **11. EMERGENCY CONTACT INFORMATION**

#### Chelan:

Lake Chelan Community Hospital 503 E. Highland/PO Box 908 Chelan, WA 98816 509-682-3300

#### Wenatchee:

Central Washington Hospital 1201 S. Miller St. Wenatchee, WA 98801 509-662-1511

#### Spokane:

Valley Hospital and Medical Center 12606 E. Mission Ave. Spokane Valley, WA 99216 509-924-6650

#### **TABLE 1 WAYPOINT COORDINATES**

Abbrev. (GPS)	Name	Latitude	Longitude	Radius (Miles)				
17H220	Old Inter.of SR 17 & Hwy 2	N47.623667°	W119.347500°	0.25				
ALMI20	Almira Grain Towers	N47.711864°	W118.936390°	0.25				
BADG33	Badger Flats (B.mt.Rd & Rd.8 SW)	N47.492519°	W120.197182°	0.25				
BLAG47	Blag Mountain*	N47.601772°	W120.509776°	0.25				
BREW09	Brewster Airport	N48.104839°	W119.720389°	0.25				
BRID09	Bridgeport Bridge	N48.002106°	W119.654164°	0.25				
BUTT37	Chelan Butte (near tower)	N47.807125°	W120.033686°	0.5				
COUL18	Coulee City Airport	N47.613523°	W119.249833°	0.25				
CRES25	Creston	N47.758483°	W118.527439°	0.25				
FARM24	Farmer Grain Towers	N47.612386°	W119.813267°	0.25				
FRST52	Forest Mountain*	N47.844603°	W120.270809°	0.25				
HART19	Hartline Grain Tower	N47.691262°	W119.103123°	0.25				
JULY35	Fourth of July Mountain*	N47.962197°	W120.163147°	0.25				
JYLZ12	Chelan Junkyard (LZ)	N47.830150°	W120.009922°	0.25				
KNEE26	Knee of 172 (172 junc. w/ McNeil)	N47.814057°	W119.807186°	0.25				
LAMO27	Lamoine	N47.728858°	W119.899379°	0.25				
LEAH20	Leahy Junction	N47.918737°	W119.390944°	0.25				
MANS23	Mansfield	N47.815431°	W119.629972°	0.25				
OKAN09	Okanogan	N48.356000°	W119.595072°	0.25				
OMAK09	Omak	N48.412631°	W119.512794°	0.25				
ORVL11	Oroville Airport	N48.958056°	W119.411389°	0.25				
PATE08	Pateros Bridge	N48.050542°	W119.903917°	0.25				
SIMS22	Sims Corner	N47.815847°	W119.362695°	0.25				
SMTH24	Smith Lake Rd & SR174	N47.975922°	W119.082870°	0.25				
SOAP12	Soap Lake (SR17 & SR28)	N47.381265°	W119.483110°	0.25				
SOCR07	Chelan Falls Soccer Field (LZ)	N47.798194°	W119.984833°	0.25				
WATE26	Waterville Airstrip	N47.656108°	W120.062892°	0.25				
WILB22	Wilbur Airport	N47.757383°	W118.740306°	0.25				
WITH25	Withrow Grain Towers	N47.702489°	W119.810139°	0.25				

\* **Caution:** Limited number of available LZs on routes to and near waypoints. Not recommended for hang glider pilots.

**Note:** The last 2 numeric digits of a waypoints abbreviation code indicate its MSL elevation in hundreds of feet.

#### CHELAN CROSS-COUNTRY CLASSIC WAYPOINT DESCRIPTIONS

- 17H220 Old Intersection of Hwy 2 & SR 17 North: Now an abandoned roadway where SR 17 previously teed from the north at Hwy 2. The waypoint is located approx. 0.9 miles ENE of the present-day intersection of Hwy 2 and SR17. Approx. 2.5 miles west of Coulee City.
- ALMI20 Almira: Grain towers on E side of town N of Main St. and Hwy 2 intersection.
- **BADG33 Badger Flats:** Junction of Badger Mountain Road and Road 8 SW. Approx. 7 miles NE of Wenatchee.
- **BLAG47 Blag Mountain:** Summit located Approx. 5 Miles NNE of Dryden. Pilot caution: limited available LZs
- **BREW09 Brewster Airport:** Middle of runway (with hangar buildings). Approx. 2 mi. E of Brewster).
- **BRID09 Bridgeport:** North side of the Bridgeport Bridge on SR 17 across the Columbia. East side of Bridgeport.
- BUTT37 Chelan Butte Tower: Summit located approx. 2.5 miles SSW of Chelan
- **COUL18 Coulee City Airport:** Middle of runway, with hangars. Approx. 2 miles E of Coulee City.
- **CRES25 Creston:** Five grain silos on the west side of town.
- **FARM24 Farmer:** Grain elevators on south side of intersection of Hwy 2 and SR172. Approx. 6.5 miles due south of Withrow.
- **FRST52 Forest Mountain:** Summit located approx. 4 miles SW of the Lake Chelan State Park. Pilot caution: limited available LZs
- **HART19 Hartline:** Grain towers on east side of town, N of Hwy 2, east of Columbia Road NE (main north/south road through town).
- **JULY35 Fourth of July Mountain:** Summit located Approx. 5 Miles NNW of Manson. Pilot caution: limited available LZs
- **JYLZ12 Chelan Junk Yard LZ:** On Gorge Road approx. 2.5 miles SSE of the Chelan River Dam.

#### CHELAN CROSS-COUNTRY CLASSIC WAYPOINT DESCRIPTIONS

- **KNEE26 Knee of SR172:** Where SR172 makes a 90 degree bend at the intersection of McNeil Canyon road with SR 172.
- LAMO27 Lamoine: Intersection of Waterville N. Road (aka Road 8 NW) with road G NW. Just east of the farm houses.
- **LEAH20 Leahy Junction:** Intersection of SR17 and SR174. NE corner of intersection.
- MANS23 Mansfield: NE corner of town; intersection of Fifth St. and Railroad St. (SR 172).
- **OKAN09 Okanogan:** Intersection of Hwy 20 and SR 215 just west of the bridge across Okanogan River on the south side of town.
- OMAK09 Omak: North end of Hwy 97 Bridge across Okanogan River.
- **ORVL11 Oroville Airport:** Middle of runway, 1.5 miles north of town on east side of Lake Osoyoos.
- **PATE08 Pateros Bridge:** North end of Hwy 97 Bridge across Methow River at the Columbia River confluence. South side of town.
- SIMS22 Sims Corner: Intersection of SR17 and SR172.
- SMTH24 Smith Lake Rd: Intersection of SR174 with Smith Lake Road. Approx. 5 miles W of the Grand Coulee Dam on SR174
- SOAP12 Soap Lake: Intersection of SR 28 and SR17, south end of town
- SOCR07 Chelan Falls Soccer Field LZ: One block east of the town of Chelan Falls. North side of restrooms
- WATE26 Waterville: NW corner of the runway at the NE corner of town.
- WILB22 Wilbur Airport: North end of runway west of town of Wilbur.
- WITH25 Withrow: Southeast side of grain elevators on the SE side of town

					Т	able	2 Cł	nelar	XC	Class	sic V	alid	Way	poin	ts														
	*	51131 W	1212 55	JCRO1	ANO21	AATE26	AFEL FE	552	JL735	TH25	RM2A	ATEOS N	ANS23	AID09 BI	AD 633	AEWO9	AGAI	AH20 SI	M522	H220		JAP12 OV	ANO9	ATT?	ATHZA	AAKO9	IN120	HB22 CB	£323
BUTT37 (Point #1)		1.9	2.4	8.3								18.8	22.2	23.0	25.2												60.3		
JYLZ12	1.9			8.7	12.3	9.5	12.2	11.6	12.8	17.6	16.0	17.7	20.4	24.9	23.3	28.1	29.4	30.1	34.0	38.5	39.6	41.1	43.3	44.2	46.4	50.7	59.3	69.2	82.7
SOCR07	2.4			6.2	10.5	8.3	13.7	14.0	10.5	15.1	17.8	16.6	20.8	23.3	24.5	28.0	28.8	29.0	32.1	36.6	37.1	42.6	41.7	43.7	47.7	49.2	58.0	67.9	84.4
LAMO27	8.3	8.7	6.2		9.1	7.3																					•		
WATE26	10.5	12.3	10.5	9.1		16.2	16.2		12.2	12.0																			
KNEE26	10.6	9.5	8.3	7.3	16.2				7.7	13.9	16.9		14.8																
FRST52	11.3	12.2	13.7		16.2			9.5			22.2																		
JULY35	12.3	11.6	14.0				9.5				13.5				22.8														
WITH25	12.7	12.8	10.5		12.2	7.7					24.4	11.5	21.9	23.2															
FARM24	16.9	17.6	15.1		12.0	13.9					30.6	16.4	27.9	19.8	34.3	32.5	28.9	25.3											
PATE08	17.9	16.0	17.8			16.9	22.2	13.5	24.4	30.6		20.6	12.0				25.5	29.9				4							
MANS23	18.8	17.7	16.6						11.5	16.4	20.6		12.9	34.6	20.4														
BRID09	22.2	20.4	20.8			14.8			21.9	27.9	12.0	12.9						18.7	2.8	32.8			33.4						
BADG33	23.0	24.9	23.3						23.2	19.8		34.6				16.5	47.8	44.9	40.8		<b>.</b> 4.3								
BREW09	25.2	23.3	24.5					22.8		34.3		20.4					20.0	26.0	37.5	4 4			40.5	30.9					
BLAG47	26.3	28.1	28.0							32.5				16.5					54.3		50.4								
LEAH20	30.9	29.4	28.8							28.9	25.5			47.8	20.0				20.5	22.1	37.4	31.7			34.6				
SIMS22	31.2	30.1	29.0							25.3	29.9		18.7	44.9	26.0						30.5	38.8			41.8				
17H220	34.4	34.0	32.1										29.8	40.8	37.5	54.3	20.5					51.9		27.3	55.0				
COUL18	38.9	38.5	36.6										32.8		40.4		22.1					53.7		26.2	56.5				
SOAP12	39.1	39.6	37.1											34.3		50.4	37.4	30.5				67.5	27.8	45.1	71.3	34.3	43.4	51.7	
OKAN09	43.0	41.1	42.6														31.7	38.8	51.9	53.7	67.5		51.3	35.4		54.0	57.3	64.4	
HART19	44.1	43.3	41.7										33.4		40.5						27.8	51.3			53.3				
SMTH24	45.7	44.2	43.7												30.9				27.3	26.2	45.1	35.4			36.1				69.5
ОМАК09	48.3	46.4	47.7														34.6	41.8	1	56.5			53.3	36.1		55.3	57.7	64.2	
ALMI20	51.5	50.7	49.2																		34.3	54.0			55.3				88.8
WILB22			58.0																			57.3			57.7				88.5
CRES25			67.9		1		1	1											1		51.7				64.2				92.3
ORVL11	-		84.4																					69.5		88.8	88.5	92.3	

Only those triangles which show the distance between triangle points #2 and #3 are Chelan XC Classic Valid Waypoint Pairs

Notes: Green cells are the distances to Chelan-area designated LZs. Mileage are rounded values - CXCC scoring computer uses actual distances.

