

SOP's for gliders at Nephi Municipal Airport (U14)

J. Randy McKnight Nephi Municipal Airport, U14, is located 3 miles NW of Nephi, UT (39.74°N/111.87°W) with a field elevation of 5,022'. A public use airport owned and operated by the city of Nephi, with additional funding and support from the Utah Division of Aeronautics (UDoT), and the Federal Aviation Administration (FAA). Pegasus Aviation Group is the on field FBO who operates and maintains the self service fuel pumps (100LL and JetA), also providing gyroplane sales, service, and flight training. Skydive the Wasatch operates a dropzone seasonally from the Nephi airport providing tandem tourist jumps and skydiving instruction. The Utah Soaring Association (USA) keeps a glider and all the support equipment necessary at the Nephi airport, for club member usage and flight instruction. The USA also manages a tow plane, providing glider tows for the club gliders and privately owned gliders (contact the Nephi glider steward for tow plane availability and scheduling). A glider winch owned by the USA is also stored and used periodically at Nephi, and at other locations as well.

For those pilots and passengers who have been flying in and out of the Nephi airport over the past decade or so have witnessed the airport's slow but steady growth in airport infrastructure, air traffic and flight activities. Improved and added taxiways, the construction of additional ramp and tie down areas, and the construction several new hangars have enhanced the usability the airport, and increased its popularity amongst Utah's aviators. In addition Nephi airport traffic can and does include flight instruction from the many flight schools in northern Utah, with student pilots practicing patterns, landings, takeoffs, departures, and instrument approaches. There's also a fair amount of transient and recreational flights taking advantage of Nephi's "lowest in the valley" fuel prices, including an occasional corporate jet providing air transport services to clients. Periodically, Utah's agricultural and natural resource interests use the Nephi airport as a base for their aerial application projects. During the fire season, the Nephi airport can become a base of operations for US Forest Service's aerial fire suppression teams. Check Notams! Nephi airport has a wide variety of different types aircraft operating in and out of the airport and surrounding airspace. Vigilance, cooperation, and attention to detail is required by all pilots, to insure safe flight operations for all users.

Birds

Caution, for extensive bird activity in the vicinity of the airport! Gulls, raptors, ravens, crows, magpies, turkey vultures, sandhill cranes, and waterfowl to name a few, are present in and around the airport. Some can be quite large, use caution!

Facilities

Airport access is through an electronic code secured main entry gate located approximately midfield. **Please use caution when driving on the ramps and taxiways, they are active!!** There's also a pedestrian gate located between the Pegasus Aviation hangar and the mobile office trailer. (For gate access codes contact your instructor or airport glider steward.)

Airport information can be found at the FAA's Digital - Chart Supplement (d-CS):

https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/

(Click on "**Chart Supplement Search**", then enter "**U14**" in the "**Airport Identifier**" search box and hit "**Go**").

Nephi is located on the **Las Vegas** VFR sectional chart which can be downloaded from the FAA's Sectional Aeronautical Chart page:

https://www.faa.gov/air_traffic/flight_info/aeronav/productcatalog/vfrcharts/sectional/

(An internet search of "**Nephi Municipal Airport**" or "**U14**" will provide links to AirNav or SkyVector websites which also provide current airport information.)

Restrooms are located in the small building on the edge of the ramp just north of "Quonset hut" hangar.

Oxygen is available from the USA supplied oxygen tanks stored in the club area of the city's hangar.

For pilots requiring water for ballast, there's a large tank located on the western edge of the north ramp (see map). Pilots must provide their own hoses. For more information and assistance contact the airport glider steward.

As a side note; Nephi has an awesome system for adding water ballast to about 30 gliders simultaneously. The brainchild of Bruno Vassel and Ron Gleason, the tank was installed primarily for contests, along with a pump, several thousand feet of buried pipe, and 30 hydrants spaced along the full length of taxiway A's glider tie down spots. With complementary trenching of the ditch by the City of Nephi, and the labor of club members, it provides contestants with a convenient method of adding water ballast to their ships.

No food is available for purchase at the airport, but restaurants and groceries are available in Nephi, 3 miles to the east of the airport.

Hotels and RV parks are also available in Nephi, no accommodations or showers are available at the airport.

Nephi's AWOS-3 118.275 (435) 623-1397

Communications

Nephi Municipal Airport is an uncontrolled field. The Common Traffic Advisory Frequency (CTAF) is 123.075. The use of proper radio technique and phraseology is always recommended

when communicating as it enhances safety. Consult the Airman's Information Manual (AIM) chapter 4, sections 2-1 through 2-14 for a review of recommended radio usage. For aero tows, announce to the tow plane that the glider is ready, example: "*Glider tow one seven victor, glider eight five whiskey, canopies closed and locked, spoilers closed and locked, ready to takeoff runway one seven.*" For the tow, the tow plane pilot will handle communications for the duration of the tow. For winching operations the glider pilot should make an announcement of his or her intentions prior to launch as recommended by the USA's "Winch Pretakeoff Checklist" <http://www.utahsoaring.org/Documents/2018%20USA%20Winch%20Final%20Pretakeoff%20Checklist.pdf>

If maneuvering for flight instruction or thermalling, periodic position reports are recommended especially when other aircraft are in the vicinity or transitioning through the airspace. Refer to the section "Landmarks and Position Reports" for more information. For air-to-air communications with other gliders and aircraft not pertaining to position and air safety and outside the airport operating area, please use the frequency 123.3. When landing, make your initial inbound call 3-4 miles out. Indicate your altitude, bearing and distance from the field or local landmarks, and your intentions. Make your second call when entering crosswind or on the 45 degrees to downwind. Make additional calls as needed.

Runways, Taxiways and Windsocks

Nephi Municipal Airport has one main paved runway; 17/35 is 6300' in length and 100' wide. Excellent condition, resurfaced in the spring 2017. The traffic pattern is designated left for both runways with a traffic pattern altitude (TPA) of 1000' agl or 6000' msl. The skydiving operation normally flies a high pattern on the east side the runway, the with glider ops using the west side on the runway (recommended pattern procedures will be discussed in more detail later).

There is also an unofficial parallel grass runway adjacent to the paved runway which is over 7000' in length and more than 100' wide. Used primarily for winching operations, tow plane landings during sailplane special events and in emergency rope break situations if there's aircraft landing or departing the main runway. The north and south ends of the grass runway are fairly smooth and rougher toward the runway center. **Not recommended during periods of wet weather or soon after. Always check its condition before use. Use at your own risk!!!**

There are two taxiways, A, which runs parallel to the runway and has an entrance to the runway at each the north and south ends of the runway. Taxiway B runs east to west perpendicular to the runway, connecting the runway, taxiway A, and the ramp. There's also a newly installed taxiway which is undesignated and not currently charted, that extends from the north end of the ramp to taxiway A, providing easier access to the north ramp and fuel pumps.

There are two windsocks. The primary windsock is located in a segmented circle just north the ramp area and is clearly visible from the north end of the airport. While visible from the south end of the airport, making an accurate determination of its position is more difficult. A second

windsock is located on the fence line on western edge of airport approximately 1000' from the south end of the main runway. With it's limited height above ground (about 6'), it's accuracy has been questioned.

Tie Down Areas

The USA club glider is tied down on the north east section of the ramp just past the city's hangar. At present the city does not charge to tie down aircraft at the airport nor does it charge for glider trailer parking. There are tie spots for visiting gliders on the north paved ramp area. You must supply your own straps, and wing supports. Additional tie down spaces for gliders are available along the east side of taxiway A. These spots are primarily used during contests events. The USA rents a corner of the city's hangar where the club stores the winch, golf cart, tow out gear, radios and other equipment. Contact the airport glider steward for tow plane availability, hangar access and assistance with tows out to the staging areas.

Staging and Towing

Towing operations are conducted with USA managed aircraft and tow pilots. While Nephi is not an especially busy airport, it can get very busy without notice. Best practices would be to spend as little time as possible occupying the runway before launching. Also avoid blocking the taxiways, stay with your glider, be prepared to push the glider aside to make way for arriving and departing powered aircraft. **Stay alert and engaged, listen to the CTAF, announce your intentions prior to staging on the runway, use common sense and be courteous.**

Federal Aviation Regulation (FAR's) part **§91.309 Towing: Gliders and unpowered ultralight vehicles**. *Section 5 states, "The pilots of the towing aircraft and the glider or unpowered ultralight vehicle have agreed upon a general course of action, including takeoff and release signals, airspeeds, and emergency procedures for each pilot"*. While face-to-face meetings may not always be possible, routine and consistent staging procedures will increase safety and fulfill the requirements of this regulation. Inform the tow pilot if you are heavy and requested towing speed.

The USA has a golf cart that can be utilized for the towing of gliders from the ramp to the staging area, personal vehicles can also be used. It is recommended to monitor the CTAF when operating vehicles on the airport surface and yield the right-of-way to aircraft. It is also recommended to place a rotating yellow hazard beacon light on top of the vehicle. The USA has several magnetic beacon lights available. After towing the glider close to the end of runway, please park vehicles to the east of the taxiways, insuring not to block runways, taxiways, and airport signage. It is also recommended that you leave the keys in your car and the doors unlocked so the vehicle can be moved if becomes necessary (also so we can retrieve you if you land out).

Often is the case there are no ground support people or wing runners at Nephi. It is best to

stage the glider on the grass on the west side of the runway, keeping the taxiway and runway clear. Be sure to announce your intentions and verify the approach course and pattern are clear before crossing the runway. The tow plane will normally be positioned on the grass on the west of the runway also. Get yourself and the glider preflighted, positive control checks done, parachutes on, radios and navigation equipment turned on, programmed and checked, seat cushions, belts and harnesses adjusted, O2 turned on and any other equipment ready to go before staging on the runway. The tow rope should also be laid out and inspected and release mechanism checked. When fully prepared and ready for launch, announce on the CTAF the staging of the glider on the runway, example: *“Nephi area traffic, glider 85 whiskey, staging runway three five for glider operations, Nephi traffic.”* Again, before moving the glider on to the runway, be sure the pattern and approach course are clear of landing traffic. Good etiquette would be to communicate with and give way to powered aircraft who are taxiing to the runway for departure. Signal the tow pilot you're moving your glider into position on to the runway, and the tow plane pilot will move the tow plane into position at the same time. Attach the tow rope to tow plane, then to your glider. Get in your glider and complete your before takeoff checklist. Once the checklist is complete, inform the tow plane pilot to take up slack. Once the slack is removed from the rope, announce on the CTAF to the tow plane pilot you are ready for take off. Include a waggle of your rudder as well.

If ground support people are available, staging can be done from the taxiway. The glider pilot and passengers should get seated and strapped in the glider. When ready, announce on the CTAF the staging of glider on the runway, and the ground support people will then move the glider into position on the runway, hook the tow rope up, signal the tow plane pilot to take up the slack, and commence launching. **The emphasis is on spending as little time on the runway as possible, but doing it in a manner that is consistent with safety.**

When staging for instructional flights, it is more convenient after the first flight to stage from the 5000' remaining sign using the same procedure detailed above (this gives about 1300' available for the landing and rollout). After landing the instructor and student should immediately get out and push the glider off of the runway onto west side grass, if there's traffic in pattern preparing to land, traffic waiting to depart, or if the instructor plans on debriefing the student before the next flight. If the pattern is clear of approaching traffic, and no aircraft waiting to depart, and the instructor can make a reasonably quick turnaround consistent with safety, restaging the glider without pushing off the runway is acceptable. **Remember stay alert and engaged, listen to the CTAF, announce your intentions prior to staging on the runway, use common sense and be courteous.**

Premature Tow Termination

Runway length and tow plane performance normally allows for sufficient runway length for premature tow termination shortly after liftoff. If the runway is not a viable option, there are several other possibilities for landing.

When departing RWY 17, there's a large field to the west perpendicular to the departure end of RWY 17. It normally has some irrigation equipment in it, but with the field's width the equipment should be avoidable. For RWY 35, several fields exist north of the airport, watch for fences and irrigation equipment. The large fields to the east of airport can be inviting for emergency landings but several hazards exist including power lines along Airport Rd., tall crops (corn), irrigation equipment and frequently grazing livestock (see maps).

The skydivers are normally released upwind of the airport from approximately 15,000' msl for a landing in the drop zone located approximately mid-field just west to the south ramp aircraft tie down area (see map). For this reason, premature tow terminations above 200', all turns should be made to west to avoid flights over the drop zone area. It also allows for landing on the grass runway while avoiding crossing the main runway.

Tow Patterns and Operations

The normal tow pattern will be a straight out upwind departure and then a turn to west. For training and instructional flights the tow pilot will stay closer to the airport by turning downwind sooner. For soaring flights, a more direct route to the low hills and ridge west of airport will be made. On most soaring days house thermals can be found on the ridge in the vicinity of the pig farm, the radio antenna, and/or the dump (see map). On occasion, spots in valley between the airport and the ridge will be working instead, and tow pilot will alter the course to hopefully put you into the lift. Instructional and training flights are usually conducted in the an area between the airport and the ridge, and about 2 miles south of the airport extending approximately 2 miles north of the airport, from 6500' msl (1500' agl) to 8000' msl (3000' agl). Instructional soaring flights will be conducted much the same way as recreational soaring flights.

Winch Launching

While winch launching of gliders has been around since the early days of glider flying, and used almost exclusively in many parts of the world, it is relatively new for most glider operations in the United States. The Utah Soaring Association purchased a used winch several years ago. With the hard work of a handful of dedicated club members who rebuilt and redesigned the winch into a highly functional glider launching machine. With a few training sessions from experienced operators the basics were learned. Over past few seasons, through trial and error (and fortunately no accidents or incidents) great progress has been made by all those involved in learning, developing and implementing a very viable, safe, cost effective and extremely fun alternative to the standard aero tow method of launching gliders most of us are familiar with.

At present, winching operations are primarily conducted as a group effort organized by the USA. The grass runway adjacent and parallel to the main paved runway is utilized for launching the gliders. With a runway length of over 7000', launches attaining close to 3000' agl have been achieved, all in less than one minute and with about a quart of fuel consumed. Using the grass runway also allows for normal airport traffic operations to continue without interruption from the

winching activities, and provides ample space to deal with premature tow termination. After normal release from the launch, the glider pilot turns to the west and either finds a thermal or performs manoeuvres in the flight training area west of the airport as mentioned above and shown on the map. The flight then continues with a normal pattern, approach and landing on the grass runway. While detailed information on winch launching is beyond the scope of this document, refer the club's website for training materials and the scheduling of winching events. <http://www.utahsoaring.org>

Landmarks and Position Reports

There are several prominent landmarks in the area used for position reports and locating house thermals. For position reports state the local landmark, and your distance and bearing from it, and altitude (see maps).

The Ponds - Nephi's sewage treatment evaporation ponds are the prominent rectangular and angled ponds about one nautical mile west of the airport. Used as IP point and announcing entry into the traffic pattern.

The Ridge - the prominent north to south running ridge, with a crest of about 6300' to 6500' msl and 3.5nm west of the airport. Good consistent thermals can be found along the length of the ridge. Caution of the antenna tower (6,743' msl) located on top of the ridge due west of the airport. Also use caution getting low on the west side of the ridge, several land outs and retrieves have been made from the valley to the west (lots of sagebrush and rough terrain).

The Pig Farm - is the agricultural operation consisting of out buildings and livestock pens, located 3nm southwest of the airport, and just north of HWY 132 on the east side of the ridge. Consistently the best house thermal in the valley. On good days you can smell the lift.

The Dump - Nephi's landfill, is located 4nm southwest of the airport, and about one nautical mile south of HWY 132, along the ridge. Also pretty consistent thermals originating from this area.

Mt. Nebo - the prominent peak 8nm northeast of airport. With its summit at 11,929' Mt. Nebo is the highest peak in the Wasatch Mountain range. Often, late afternoon thermals can be found along the southwestern facing slopes and ridges. Ridge lift can also be found on days with adequate wind speed. Be cautious of downdrafts on the lee side of the summit ridges. Review your mountain flying techniques or fly with an instructor, if you unfamiliar with them. Lenticular clouds have also been observed above and downwind of peak, although the author has no knowledge of anyone wave soaring in the immediate vicinity.

Traffic Pattern

Both RWY 17 and RWY 35 are designated standard left traffic for airplanes. However, with the skydiving operation, and the skydivers descending over mid-field and landing in an area just off the west side of the south ramp, flights over mid-field should be avoided. The jump plane pilot will make several cautionary statements on the CTAF prior to releasing the skydivers, to “avoid flights over mid-field between 15,000’ and below for skydiving operations”. With most glider activity taking place to the west of airport, gliders normally fly a pattern on the west side of airport. Flying right traffic for RWY 17 and left traffic for RWY 35 and avoiding flights over mid-field. Cross country flights returning to airport from the east can fly a pattern from the east side of the airport.

Initial Pattern (IP) Entry Points

For landing **RWY 17** an IP point on south edge of the “The Ponds” at between 6000’ and 6200’ msl, works well for both the main paved runway and for grass runway.

For landing on **RWY 35** using an IP point a field’s length north of “The Ponds” at between 6000’ and 6200’ msl works well for both the main paved runway and the grass runway.

Landings at Nephi are fairly straightforward with prevailing winds frequently aligned with the runways. The main safety issue is watching out for and maintaining separation from other air traffic. With a wide variety of aircraft types utilizing the Nephi airport, using the concepts “**see and avoid**”, “**situational awareness**” and “**sterile cockpit**”, traffic conflicts can be minimized and avoided. Use extra vigilance for aircraft traffic on left base when you’re flying a right base pattern. Aircraft approaching each other straight ahead and at the same altitude can be very difficult to see. Also watch out for traffic flying practice instrument and straight in approaches.

While landing on the paved main runway, other hazards include “runway end identifier lights” when landing short or landing long and rolling off the end of runway. Also avoid the “runway edge identifier lights” when rolling off to the sides of runway. Hitting the lights can cause significant glider damage, increase the chances of a ground loop and pilot and passenger injury. Also to add insult-to-injury, the city will charge you a replacement fee for the damaged or destroyed airport equipment.

When landing on the grass, hazards include the “runway end identifier lights”, “distance remaining” signs, “papi” lights (RWY 35), a ditch along the western edge of the grass, and six foot high fences on both the north and south ends. Both ends of the runway are fairly smooth (for the first 2000’) with roughness increasing as you approach mid-field from both directions. While city periodically mows and drags the grass runway to smooth it out, small rocks (fist sized) can be dislodged, creating an additional hazards. **Not recommended during periods of wet weather or soon after. Always check runway conditions before using. Use at your own risk!!!**

The infield area between the main runway and taxiway A is not recommended for landing! Uneven and rough terrain along its entire length, and a large ramp like berm at taxiway B make it unsuitable for landings.

After landing, **do not leave your glider unattended on the runway or taxiway.** Promptly move your glider to the infield or off into the grass on the western edge, insuring the glider is completely clear of the runway. Also avoid blocking the center of the grass runway as well. Be alert, use caution, monitor the CTAF, and announce your intentions, before operating vehicles on the runways and taxiways and while retrieving and towing you glider back to the ramp and tie down areas. Nephi Municipal airport is an active public use airport, be courteous and compliant to insure that the glider flying remains a welcomed activity at the airport.

Emergency Crosswind Runway

Strong thunderstorms can and do develop in the vicinity of the Nephi airport. Outflow from these storms can produce very strong crosswinds as these storms move across the valley. Wind direction can change quite rapidly over a short period of time. Use extra caution when these storms are forecast and have a plan. When the crosswind component exceeds the recommended limits for landing your glider, a short emergency landing area exists at the north end of airport, and has been used to execute safe landings. This area runs along the inside of fence line on the very north end of the airport property (see map). There are also fences on both the east and west sides of the airport which are difficult to see from the air, and extreme caution must be exercised to avoid hitting them. It is highly recommended to take a walk, and inspect the area before attempting a landing.

Directions to the Airport

From the north - take I-15 south to exit 228 for Nephi, UT-28 toward I-15 Business / N Main St. Turn right onto State Rte 41/UT-28 S. In .4 miles, turn right onto Old Hwy 91. At .4 miles turn left onto Country Dr. (before large propane tanks), drive west for 1.3 miles and turn left onto Airport Rd. In .7 miles the airport gate will be on the right.

From the south - take I-15 north to exit 222 for Nephi, UT-28 toward I-15 Business / S Main St. Turn left onto UT-28 N/S Main St. (signs for I-15 Business). In 2.1 miles turn left onto UT-132 W / W 100 N (signs for Delta). In 1.5 miles turn right onto Airport Rd. In 2 miles the airport gate will be on the left.

Possible Landing Area
RWY 35
Below 200' no useable
runway remaining

Emergency Crosswind
Landing area

Country Dr.

Airport RD.

Tow Out Vehicle
Parking

Segmented Circle
and Windsock

Water Tank

Club Glider
Tie Down

City's Hangar

Restrooms

Entry Gate

Skydiving
Dropzones

IP
RWY 35
6200' MSL

Areas Not Suitable
For Landing

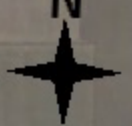
Grass Runway

IP
RWY 17
6200' MSL

Possible Landing Area
RWY 17
Below 200' no useable
runway remaining

Tow Out Vehicle
Parking

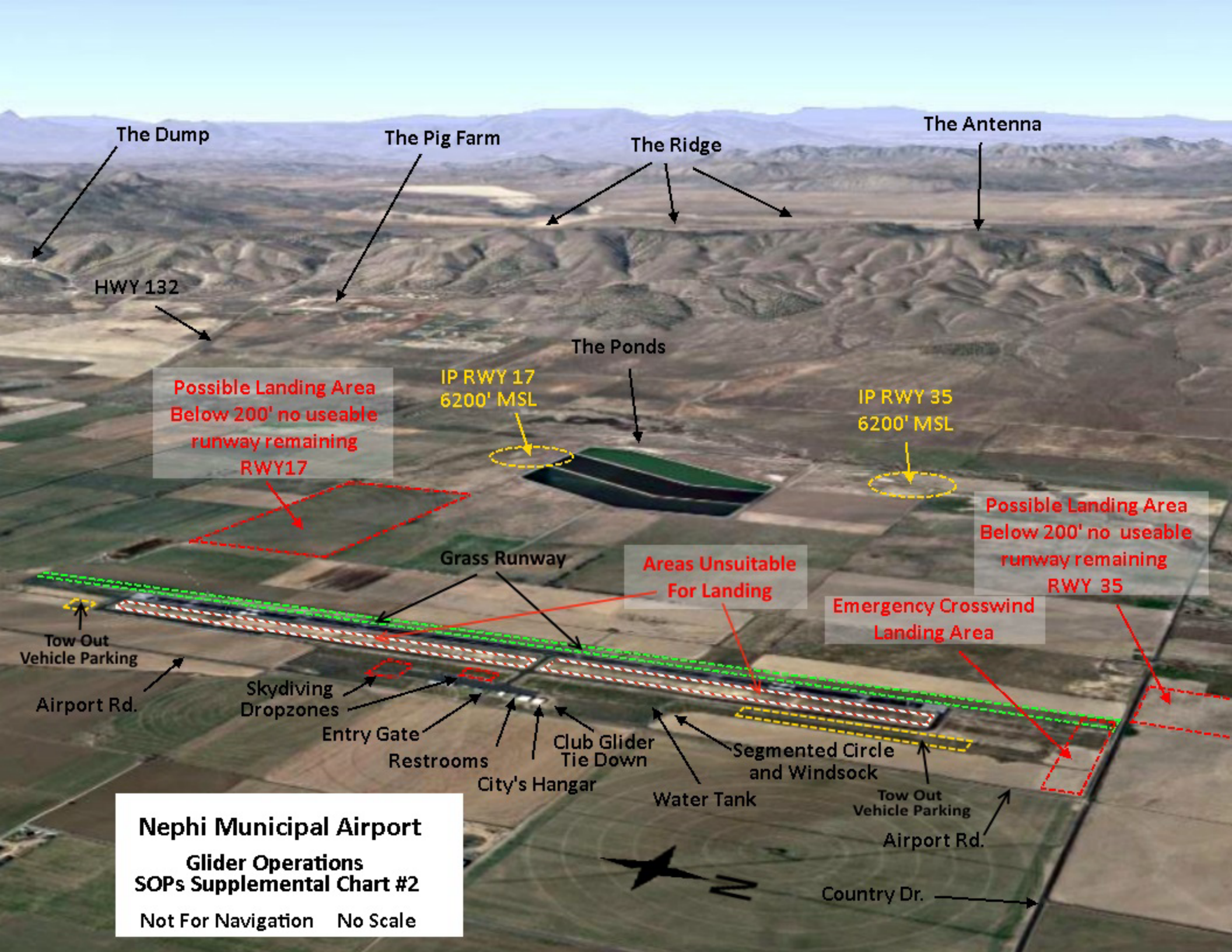
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Airport RD.

Nephi Municipal Airport
Glider Operations
SOPs Supplemental Chart #1
Not Navigational Use
No Scale

Google



The Dump

The Pig Farm

The Ridge

The Antenna

HWY 132

Possible Landing Area
Below 200' no useable
runway remaining
RWY17

IP RWY 17
6200' MSL

The Ponds

IP RWY 35
6200' MSL

Possible Landing Area
Below 200' no useable
runway remaining
RWY 35

Areas Unsuitable
For Landing

Emergency Crosswind
Landing Area

Grass Runway

Tow Out
Vehicle Parking

Airport Rd.

Skydiving
Dropzones

Entry Gate

Restrooms

City's Hangar

Club Glider
Tie Down

Water Tank

Segmented Circle
and Windsock

Tow Out
Vehicle Parking

Airport Rd.

Country Dr.

Nephi Municipal Airport
Glider Operations
SOPs Supplemental Chart #2
Not For Navigation No Scale

