

PASCO (Pacific Soaring Council) ADVISORY TO GLIDER PILOTS

RECOMMENDED COMMUNICATIONS PROCEDURES FOR FLYING GLIDERS IN THE VICINITY OF RENO, NV

The airspace around Reno has the highest number of glider-commercial jet near misses of anywhere in the US. It has also been the location of the only glider-jet midair collision in the US to date.

All gliders flying out of Minden, Truckee and AirSailing need to be aware of and practice the following procedures in order to increase our visibility to commercial air traffic arriving at or departing Reno International Airport. This is a safety issue both for us and passengers in the commercial aircraft. More glider pilot participation on the NorCal Approach frequencies makes our presence better known to airplane traffic that is on those frequencies.

If you fly with any regularity in the areas around Reno, NV, and do not have a transponder installed in your glider, please urgently consider fitting and using a Mode-C transponder as soon as possible.

Transponder equipped gliders near Reno are encouraged to squawk 0440. This code has been established by NorCal TRACON as a standard code to identify gliders. This same code will also be used by tow planes any time they are trailing a tow rope behind them – with or without a glider attached to it.

These Guidelines have been issued as a Letter to Airmen by the FAA. Please ensure you read, understand and comply.

1 **Airspace controlled by NorCal TRACON**

NorCal TRACON (NorCal Approach) is responsible for separation and sequencing of aircraft in a 20 nautical mile circle around Reno. Their radar is capable of seeing out to 40NM.

NorCal TRACON has requested **increased radio communication from glider pilots within 40 NM of Reno** to help them increase safety for all aircraft in the area.

This area can be defined in general as any altitude within 20 nm of RNO or above 10,000 feet between 20 nm and 40 nm of RNO.

Air traffic using Class A airspace will also be climbing and descending through Class E airspace **between 20-40NM from RNO but above 10,000'**.

Standard arrival and departure routes into RNO are indicated in the document below. The areas 10 NM either side of these routes are considered the standard flight corridors.

On clear days, traffic heading to RNO may be cleared for visual approach once they have the airport in sight. In that case, they will not necessarily be following these routes.

2 Key Contact Points

All aircraft in the 20NM circle are asked to contact NorCal Approach on 126.3 to the north and on 119.2 to the south.

In particular it is VERY IMPORTANT to be in radio contact with NorCal Approach if flying in or intending to cross any of the major arrival departure corridors marked on the map below.

You must inform NorCal Approach of your N number, transponder status, position relative to the nearest airport, altitude and intentions. You should have the current ATIS (135.8) from Reno before calling.

It is recommended to call NorCal Approach within 40 nautical miles of Reno with position reports. Reporting position and status to Oakland Center (125.7) beyond 40 nautical miles is also advisable.

Position reports should be given relative to 'intersections', VOR's and and/or airports marked on the sectional. NorCal Approach won't always know our standard mountain range landmarks.

3 Procedures for Communicating with NorCal Approach:

Glider pilots should talk to **NorCal Approach** when in high density air traffic airspace or about to enter that airspace. There are two frequencies to use to contact **NorCal Approach: 126.3 in the north and 119.2 in the south.** These frequencies appear in a white box on current sectionals. The dividing line runs approximately through the Squaw Valley and Mustang VORs, or approximately parallel to I 80.

Example:

NORCAL APPROACH, GLIDER Nxxxx.

After NorCal Approach acknowledges, continue with the following:

GLIDER nnn NEGATIVE TRANSPONDER (or SQUAWKING 0440) TEN MILES EAST OF MINDEN CLIMBING THROUGH ONE-TWO THOUSAND, EXPECT ONE-SIX THOUSAND, WILL PROCEED SOUTHEAST.

When you leave the thermal and start to fly down the Pine Nuts (eg.) make a third call: NORCAL APPROACH, GLIDER nnn, ONE-SIX THOUSAND, HEADING SOUTH, FREQUENCY CHANGE REQUESTED.

After NorCal Approach acknowledges, you may switch frequencies such as 123.3. You may elect to stay on their frequency or they may ask you to remain on frequency until out of their radar range.

Do not communicate directly with other aircraft on the NorCal Approach frequencies.

It is recommended that pilots flying gliders that have a transponder contact NorCal Approach on every flight to verify that NorCal TRACON is receiving their transponder squawking 0440 and to verify that the altitude readout is correct.

A request for a transponder check might go something like this:

Glider 123AB:

NORCAL APPROACH, GLIDER 123AB, SQUAWKING 0440, REQUEST TRANSPONDER CHECK

NorCal Approach:

GLIDER 123AB, NORCAL APPROACH, SAY LOCATION AND IDENT, RENO ALTIMETER 30.05

Glider 123AB:

GLIDER 123AB, TWO MILES WEST OF AIR SAILING, IDENT (momentarily press IDENT switch on the transponder and set altimeter to 30.05)

NorCal Approach:

GLIDER 3AB, IDENT OBSERVED 23 MILES NORTH OF RENO AIRPORT, 9200 FEET

Glider 123AB:

GLIDER 3AB, INDICATING 9300 FEET CLIMBING, WILL MONITOR YOUR FREQUENCY
or

GLIDER 3AB, INDICATING 9300 FEET CLIMBING, THANK YOU, CHANGING
FREQUENCY TO 123.3

ATC altitude readout and glider altimeter indicated altitude should agree within +/- 200 feet with the glider altimeter set on the Reno altimeter setting. The ATC computer corrects the transponder pressure altitude to the Reno altimeter setting.

4 Radio Etiquette

Here is some ATC terminology to become familiar with. A more comprehensive tutorial for talking to ATC is posted on the PASCO web site under articles (<http://www.pacificsoaring.org/articles.html>).

Affirmative	don't say "yes"
Negative	don't say "no"
Roger	used to acknowledge last transmission
Localizer	electronic beam paralleling a runway – used for ILS approaches
Maintain (at or below 8000)	ATC commands this altitude

Unable	use this word to tell ATC you can not comply with instructions
Squawk (zero four four zero)	set 4-digit code on transponder to 0440
Ident	press transponder ident button/switch
Radar Contact	you have been positively identified on radar
Radar Contact lost	typically, you are below radar coverage or behind a mountain

5 Description of Reno Arrival and Departure Routes:

With a wind from the north, NorCal Approach typically uses runway 34 for arrivals and departures. When the wind is out of the south they will usually use runway 16. Each has its special considerations for gliders flying out of Minden, Truckee or Air Sailing.

BE AWARE that the “lines” on the chart that represent these approach routes are only guidelines. Traffic can be up to 10 miles on either side of these “lines” and can be anywhere on clear days if cleared for a visual approach.

If you are high enough to see Reno you will probably be able to hear the ATIS (135.8) so you will know which runway is in use and what the Reno altimeter setting is. Listen to ATIS when you are high enough to see the airport, and BEFORE contacting NorCal Approach.

DEPARTURES:

Departing jet traffic will usually climb into Class A airspace within 20 miles of the airport (Carson City to the south and AirSailing to the north). Lower performance aircraft traffic may remain in Class E airspace in these areas.

SOUTH: When Reno traffic is departing to the south they will normally climb straight out in the direction of Carson City until approximately 10,000' over the south end of Washoe Lake or Virginia City, then continue straight ahead or begin to turn east or west depending on their destination. Traffic may be in the vicinity of Slide Mountain on a west departure and along the I-80 corridor toward Silver Springs on an east departure.

NORTH: On a northerly departure, traffic will climb to 10,000' just east of Stead and then begin heading northwest, directly northeast or south, northeast and southeast via the Mustang VOR.

ARRIVALS:

STRAIGHT-IN RUNWAY 34 (Southern): Arriving from the south, high speed traffic will frequently be brought to an intersection directly south of Minden at approximately 14,000', then directed to fly a straight-in approach that will put them over Carson City at approximately 12,000'. This puts high speed traffic at glider altitudes over Minden, Carson City, and east of Truckee. You should expect this traffic and be in radio contact with NorCal Approach if you are in the same airspace.

STRAIGHT-IN RUNWAY 16 (Northern) ARRIVALS: Arriving from the north, traffic will be vectored to an intersection at 12,000', then to intercept the ILS localizer for a straight in approach to runway 16. The traffic will often be told to “intercept the localizer for a straight in approach”. This puts them in the same airspace as gliders thermalling over the Dogskins. You need to be in radio contact with NorCal Approach when you are in this area.

CIRCLING RUNWAY 16 (Southern) Traffic arriving from the south when runway 16 is in use will be vectored over Mustang VOR (near Sparks), then north of the airport for a left turn back to runway 16. This approach often puts traffic directly over the Pine Nuts and Dayton on a heading for the Mustang VOR. It also will put gliders flying south of Air Sailing or along the Pyramid Range in the same airspace as the Reno arrivals.

NORTHEAST RUNWAY 16: There are a significant number of arrivals on the ANAHO Arrival (flying over Anaho Island on Pyramid Lake) from the northeast that intercept the ILS localizer for a straight-in approach to runway 16 approximately 10 miles south of PYRAM Intersection. They may be descending between 12,000 to 8,500 feet crossing Warm Springs Valley, putting them in proximity to glider traffic flying south of Air Sailing.

SOUTHWEST RUNWAY 16 This traffic will be coming from the vicinity of the TRUCK intersection and crossing over Stead descending to 8,500 feet to intercept the ILS localizer for a straight in approach to runway 16.

6 Intersections and VOR's on the San Francisco Sectional near Reno:

Name Location Coordinates (appx)

<u>Name</u>	<u>Location</u>	<u>Coordinates (appx)</u>
Halle	West of north end of Dogskins	39:55.4N, 119:57.0W
Pyram	South end of Dogskin Mountain	39:53.8N, 119:45.3W
Nicer	Southeast of AirSailing	39:44.8N, 119:39.9W
Wadds	In between Nixon and Waddsworth	39:43.5N, 119:19.1W
Verdi	East of Verdi Peak (almost into Class C)	39:29.0N, 119:55.0W
Truck	North of Truckee, near Stampede Reservoir	39:27.9N, 120:09.6W
Chime	Just north of Rabbit Dry Lake	39:21.4N, 119:26.0W
Vikes	Just east of Virginia City	39:18.0N, 119:35.4W
Ryann	East of Dayton (north of Yerrington)	39:14.0N, 119:16.5W
Marri	Just east of Alpine Cty Apt.	38:46.0N, 119:42.0W
Richy	Over the south end of Lake Tahoe	39:00.1N, 120:01.0W
Mustang VOR	Just east of the north end of RNO	39:32.5N, 119:39.2W
Hazen VOR	Between Tiger and Fallon NAS	39:31.5N, 118:59.8W
Squaw Valley VOR	Top of Squaw Valley ski resort	39:11.1N, 120:16.0W

Note that aircraft flying under IFR (instrument flight rules) will report their position as on the xxx radial of a specific VOR. This is how they will communicate with approach

7 Frequently Asked Questions

- 1) This is going to be too much work. It will keep me from being able to concentrate on flying.

Not true – cockpit workload is only marginally higher and with practice the communications skills become habit – just like your ability to thermal .

- 2) What if I am in a gaggle and need to be on 123.3 for safety?

Request a frequency change before entering the gaggle. Let the controller know that you are requesting the change to enter a thermal to climb with other gliders. If there are 3 or 4 gliders in the gaggle and at least one glider has a transponder, Reno may request that you return to their frequency only when you leave the gaggle.

- 3) What do I do if the controller does not acknowledge me?

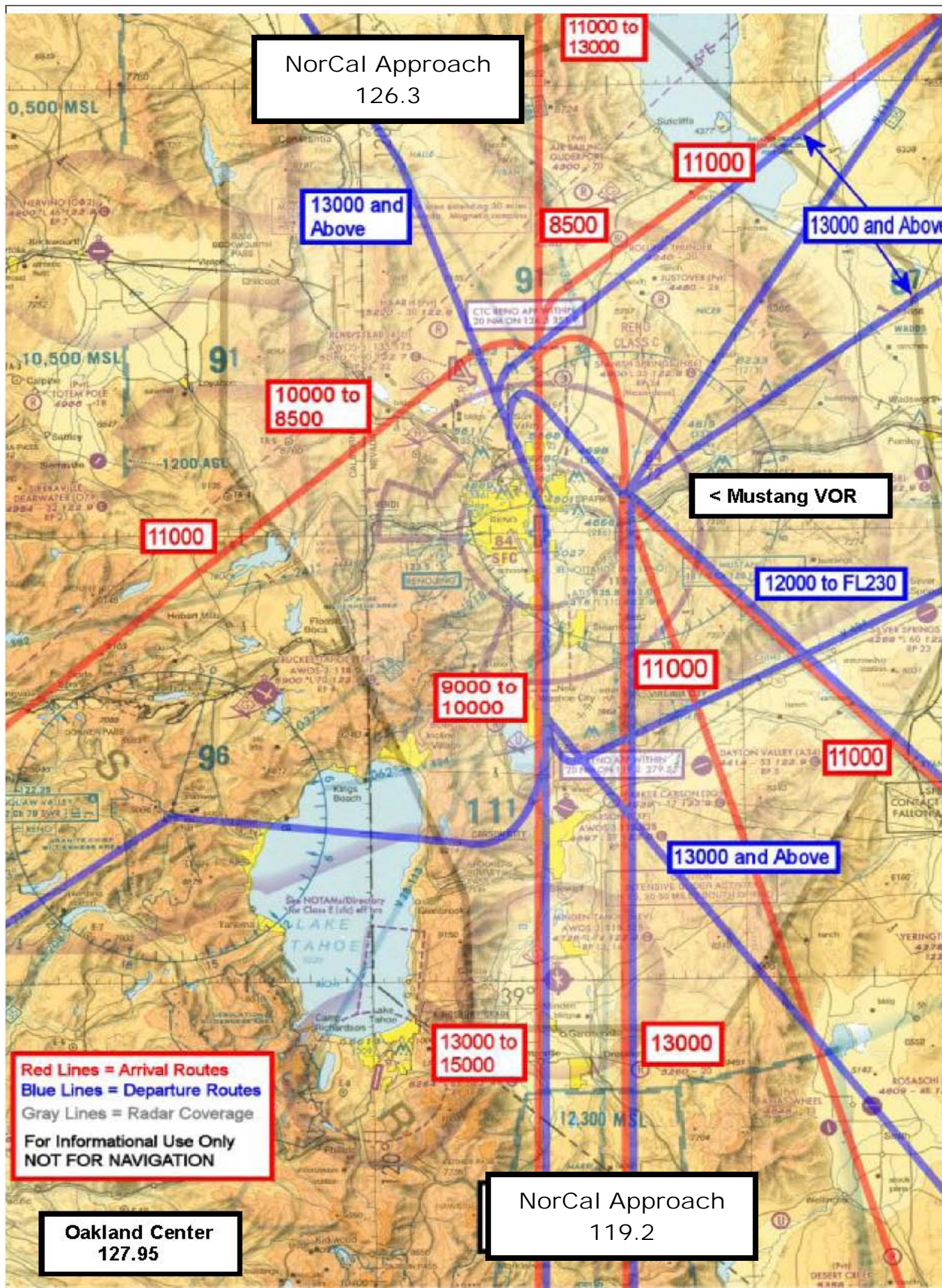
Controllers may not respond right away for several reasons. They may be busy with other traffic that is in a more critical than you are at the moment. They may not hear you if you are out of range or have a weak radio. If you do not get a response after your second attempt, broadcast your position as if they had responded (GLIDER N1234 TEN MILES EAST OF TRUCKEE CLIMBING THROUGH ONE-TWO THOUSAND, EXPECT ONE-SIX THOUSAND, WILL PROCEED SOUTHEAST). When you get higher or closer to Reno, try calling them again. If you suspect that you are being ignored, note the time and call NorCal TRACON (916-366-4019) when you get on the ground let them know what happened.

- 4) Should I talk to an airliner or small jet if I know that I am being called as traffic to them?

You should not talk to ANYONE other than NorCal Approach on the approach frequencies. It would be appropriate to tell NorCal Approach when you have traffic, such as an airliner, in sight.

- 5) Will airliners and small jets be descending through clouds below 18,000 feet?

Absolutely! Most airliners and small jets will be flying on Instrument Flight Plans which means they do not have to stay away from or out of clouds.



NorCal Approach
126.3

11000 to
13000

13000 and
Above

11000

13000 and Above

10000 to
8500

< Mustang VOR

11000

12000 to FL230

9000 to
10000

11000

11000

13000 and Above

Red Lines = Arrival Routes
Blue Lines = Departure Routes
Gray Lines = Radar Coverage
For Informational Use Only
NOT FOR NAVIGATION

13000 to
15000

13000

Oakland Center
127.95

NorCal Approach
119.2