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Coos Bay Coastal Hops

The difficult, we do immediately! The impossible takes a little longer…

www.coosbayhops.com

It's Tougher in Alaska

Setting up TeamSpeak for Coos Bay Hops Pilots

TeamSpeak is a tool designed for better communications in Coos Bay sessions. While Coos Bay members communicate on a TeamSpeak channel, our Premium members communicate on a separate channel. This is designed to provide an organized and enjoyable flying experience for all Coos Bay members. The methods to set-up your computer with TeamSpeak is described below.

Download the client software from

http://www.goteamspeak.com/index.php?page=downloads

Select Connection: Connect

Right click on New Server, then add a new server called Coos Bay and click OK.

On the right side under server Address enter 216.86.148.172:8821.

Add your nickname (name used on Flight Sim please), then click Anonymous as the user.

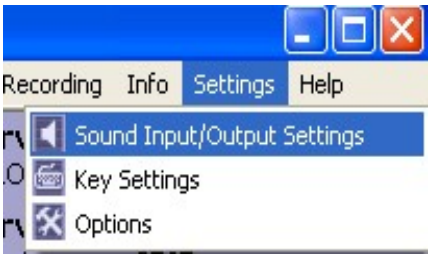
Enter Coosbay as the server password and then click connect.

Note: Team Speak is not free for use unless you are a Coos Bay Member in good standing. Please do not share the Pass Word with none members.

Although there may be no one there at that moment, we will be on and off thought out the day and night to make sure our members enjoy their experience flying with Coos Bay Hops.

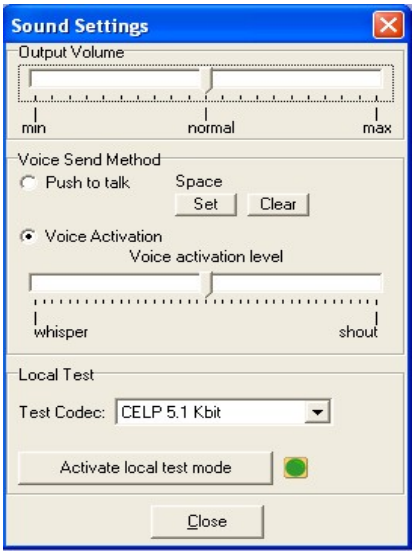
We ask you to please be nice and polite to members. The password may change from time to time. Please check forum for new password.

To ensure you get the maximum teleconferencing pleasure you should set up your microphone level. Click on the 'Settings' menu and select 'Sound Input/Output Settings'



Voice Send Method: Remember to change from voice activation to PUSH TO TALK.

Click on the 'Activate local test mode' button and talk into your microphone. You should see the green light next to the button light up with a normal conversational tone. The light may stay dark if you're whispering or humming, breathing and panting. If the light comes on all the time, or not at all; adjust the voice activation level slider until it cuts in at the right volume.



Voice Send Method: Remember to change from voice activation to PUSH TO TALK.

Basic Pilot Training

Airspeed Variations

Your airspeed indicator should vary during a well-executed flight, unless and until you change it by trimming your elevator up to a higher position or down to a lower position.

The functions of throttle and elevator must be well understood. Increasing your throttle setting does not necessarily make the airplane fly faster, and decreasing it does not necessarily make the air-plane fly slower. Further, avoid a practice of climbing by application of up elevator, nor of descending by application of down elevator. In a smooth flight, the throttle is your altitude control.

If you want to climb, increase your throttle setting a few notches; if you want to descend, decrease it. If you want to make the airplane stay at a given altitude, but it's climbing or descending slightly, counteract that tendency with small throttle adjustments. Altitude slipping down? Add a notch of power. Gaining altitude slightly? Take off a notch of power.

Elevator is essentially used for airspeed control. A higher elevator setting (or elevator way up) will result in a slow airplane. Lower settings (settings closer to straight or neutral) will result in higher airspeeds. A straight or neutral elevator will, at normal cruising altitudes, yield maximum cruise speed. An elevator setting below neutral will pitch the nose of the aircraft down, and should only be used deliberately if you are in a big hurry recovering from a stall, or to pick up speed before a steep climb as in stunting.

A light plane can successfully taken off, fly, and land without touching the elevator. You should try this because to prove that throttle controls altitude. Here's a way to do it:

Flying without Elevator

Try this with a small propeller plane. Set your elevator so the elevator position indicator is about three-quarters of the way up the gauge. Apply full power, and let the airplane take itself off and climb (leave the gear down). As it climbs, gradually reduce power while watching the VSI (Vertical Speed Indicator), which tells you your rate of climb in hundreds of feet per minute (FPM). Stop reducing power when you are climbing at 500 FPM. Note your airspeed (it will be relatively low due to your high elevator setting).

Climb to about 1000 feet, reduce power until the VSI shows a zero rate-of-climb. Adjust power up or down a notch as needed to keep the VSI needle at 0 (always give the airplane a little time to react to new power settings). With VSI 0, you'll be flying straight and level. Note your relatively low rpm reading, and that your airspeed is virtually the same as it was when you were climbing. This is cruise

Adjust power to increase the rpm by about 200, pay attention to your VSI (airplane climb). Then, reduce the rpm to the same level and notice the airplane again flies straight and level, but at the new altitude. Throttle is your altitude control.

Now use aileron or rudder to turn the aircraft toward any likely landing area, anywhere there's grass without obstruction. (If you are new to the simulator, first pause and read "Making Turns" below.)

Reduce power gradually until the VSI shows you are descending at about 500 FPM. This is the standard descent rate. Your glide is virtually flat and you can let the airplane land itself exactly as it is configured now. It won't even bounce. To stretch the glide, land further ahead. You can add a little power and the rate of de-scent will lessen. You could also back off your power completely, to idle, and the airplane will land safely. Note that your airspeed will remain virtually constant in any and all of these configurations. And you haven't touched your elevator at any time in the flight. Thus it is evident that, just as throttle is your altitude control, elevator is your airspeed control. Now you know it.

Making Turns

In the air, rudder is valuable for "yawing" the aircraft (rotating it on its vertical axis; also called the yaw axis) to a slightly different heading. As a general rule, use a few strokes of rudder for a heading change of 30 degrees or less. On landing approaches, rudder will help you line up more precisely.

Ailerons are used to bank the aircraft in the direction you wish to turn. The steeper the bank, the faster the turn.

Uncompensated banks and turns (steep ones in particular) result in a loss of altitude. The steeper the turn the more altitude loss. To prevent this, compensate for the loss of lift by adding a little up elevator before starting the turn (or even during it). As you level the wings, return the elevator to its prior position. Adding power before the turn will yield much the same result.

The Purposes of Flaps

Flaps are airfoils on the trailing edge of the wing. In normal flight they are at 0, and act simply as part of the wing.

When exceeded (10 degrees or so) for takeoff, they increase the aircraft's lift-to-drag ratio and thus shorten the takeoff run (you should zero them when airborne). In flight, flaps can be used to further slow down an already slow airplane (do not apply them when in maximum cruise configuration, as the relative wind could tear them off and as it may happened in real flight) by increasing drag and at the same time lowering the speed. Finally, on landing, flaps permit a steeper angle of descent without undue increase in airspeed, and a landing at lower air-speed. Pilots frequently extend them all the way when on final approach to a runway.

The Effects of Altitude

Higher altitudes call for higher power (rpm), in order to deal with increasingly thinner air where the propeller has less air to bite into. Thus a power setting that finds you straight and level at, say, 1500 feet will find you descending if you're at 4500 feet. You'll need more power up there; but at the same time your airspeed will be higher. At very high altitudes, all the power you have may not be enough. When that's the case, use a higher elevator setting (spare your engine by setting your elevator high enough to fly level with something less than full power). At very low altitudes, the reverse is the case; you'll need a lower power setting to fly level at 500 feet than at 2000 feet, and your airspeed will be lower at the lower altitude.

Runway Numbers

Runways are numbered from 01 to 36, and describe the approximate magnetic bearing of the runway to the nearest 10 degrees, with the final 0 dropped. Thus Runway 01 can be expected to bear 010 degrees or close to that, Runway 10 to bear 100 degrees or close, and Runway 36 to bear 360 degrees (equivalent to 000) or within a few degrees of that heading. A full description of a given strip thus involves two numbers, each being the reciprocal of the other, such as Runway 06/24. Landing on 06 (which bears approximately 060 degrees), your landing is to the northeast, and landing on 24 (bearing approximately 240) it's to the southwest.

Landing Tips

Everyone who flies Flight Simulator has difficulty landing due largely to the absence of vertical and/or dimensional references, the absence of natural real-world peripheral vision, and the lack of judging one's height over the ground/runway during the final approach. Only practice will lessen the landing difficulty and no landing will ever be routine.

Techniques to help you improve your landings early in the game

Slow the airplane down (in the case of propeller-driven aircraft, to something between 60-80 knots). It is far easier to land a slow airplane than a fast one.

Give yourself some distance. Plan your flight as you near the airport and allow yourself a long final approach (its all about the approach) to give you time to recognize the lie of the active runway and to make alignment corrections early on. If you're flying a pattern, extend the downwind leg which results in a wide base leg and a longer final.

Adjust power and controls (ailerons, rudder, elevator, flaps) to keep the runway threshold straight ahead and, most importantly, steady at a point just a little below the center of your windshield. Power is the key here (along with flaps as desired to steepen your descent). If the runway threshold is above the visual center of your windshield, you are undershooting and if you continue without correction you will land short of the threshold. If the threshold is well below the center of your windshield, you are likely overshooting and will land too far up the runway (or beyond the end of it). Remember that if something is on your windshield, you are headed straight for it. That's why you want to keep the runway threshold as motionless on your windshield as possible while you descend. If it moves up the windshield, add power and/or a notch of up elevator to reduce your rate of descent. If it moves down your windshield, reduce power, put on some flaps or more rarely, add a notch of down elevator to increase your rate of descent.

The final stages of the normal landing (not all landings are normal) involve three actions:

Flattening the glide by means of up elevator which further slows the airplane while you still have 50-100 feet to descend.

Flaring (pitching the nose of the aircraft up) a few feet above the runway (typically involves two quick notches of up elevator).

Continuing back pressure until the wheels touch down. This action keeps the nose high, and in a good landing your aircraft will virtually stall at the moment of touchdown. Should you get a stall warning before the wheels touch down a slight elevator will to counteract it.

"What is windshear? Can it rip the wings off or otherwise crash a plane?"

One of those buzzwords that scare the crap out of people is windshear. This is a sudden change in the direction and/or velocity of the wind. Remember that a plane's airspeed takes into account any existing headwind. If that velocity suddenly disappears or shifts to another direction, those knots are lost. It can happen vertically, horizontally, or both, as in the case of a microburst preceding a thunderstorm. A microburst is an intense, localized burst of air from a storm front. Think of it like an upside down mushroom cloud. The potency of windshear runs the range of barely noticeable to potentially deadly. When airplanes are taking off or landing, they operate close to their minimum allowable speeds which make planes susceptible to shear danger. At higher speeds it's not of such concern.

Fortunately, windshear has become easier to forecast, and as a rule it does not appear out of nowhere, flipping a plane upside down without warning. Conditions that propagate shear are generally predictable, and pilots are trained to avoid them. Windshear got a lot of press in the 1970s and 1980s when it was still a misunderstood phenomenon. The crash of Eastern flight 66 in New York in 1975 is considered the windshear accident after which experts began to study it more seriously. The last headline crash attributed to windshear was in Dallas in 1985. In the case of windshear, pilots are worried about losing speed.

Test your pilot knowledge … (answers from February Issue)

When a pilot transmits "amount of fuel remaining" to ATC, this amount should be given in…

a. gallons, not including reserve
b. gallons, including reserve
c. pounds, not including reserve
d. pounds, including reserve
e. time, not including reserve
f. time, including reserve

f – is the correct answer

"Fuel Remaining - A phrase used by either pilots or controllers when relating to the fuel remaining on board until actual fuel exhaustion. When transmitting such information in response to either a controller question or pilot initiated cautionary advisory to air traffic control, pilots will state the APPROXIMATE NUMBER OF MINUTES the flight can continue with the fuel remaining. All reserve fuel SHOULD BE INCLUDED in the time stated, as should an allowance for established fuel gauge system error."

What is the meaning of "clear of the runway"?

a. A taxiing aircraft, which is approaching a runway, is clear of the runway when all parts of the aircraft are held short of the applicable holding position marking.
b. A pilot or controller may consider an aircraft, which is exiting or crossing a runway, to be clear of the runway when all parts of the aircraft are beyond the runway edge and there is no ATC restriction to its continued movement beyond the applicable holding position marking.
c. Both a and b
d. None of the above

c – is the correct answer

Information in this newsletter is developed by Kevin Kashi and Ted Robin using the Coosbayhops website and other published information on the internet. For questions, comments or suggestions regarding methods to improve the skill sets of PC pilots, airport and airplane design, please contact Kevin at CoosBayKevin@aol.com or Ted at trobin@molalla.net.