

## The Nuances of Off-Highway Driving by Bill Burke

You've all heard me discuss the "finesse" of off-highway driving, but this article is about the "nuance," which is a slightly different thing!

(Finesse: refinement, delicacy, subtlety. Nuance: implication, hint, symbol)

Ed Jennings called from Texas to sign up for five days of advanced private training in Moab with me recently. In preparation, he read most of my articles, viewed other web sites and scoured the media about using a vehicle off-highway. It became apparent to me during the first day that, even though I write about a variety of situations when off the highway dealing with rocks, mud, sand, dirt, winching, lockers, among other things, I have failed to discuss the NUANCES of driving in difficult situations.



Let's face it, driving off-highway over difficult terrain is VERY energy-consuming. It takes a lot of FOCUS. Now I am not writing about the usual dirt roads and mild 4-wheeling we do most of the time. I am talking about the 21 Road, Moab Rim, Hellcliff Canyon kind of intense 4-wheeling. Although the former does take concentration and effort and does require calm thought and practiced action, the more difficult types of terrain call for very serious thinking.

There are times when the idiom: GETYERDAMFOOTOFFDA CLUTCH! does not apply. There are times when USE NO BRAKES except the engine is nonsense. There are even times when "Go as slow as possible but as fast as necessary" isn't practical. And there are times when an automatic transmission is better than a stick--I don't care who the driver is!

The terrain will try to drive your vehicle for you! Feeling the steering wheel get pulled away from you can have dangerous repercussions. The tire will drop (or raise) and the steering wheel will turn with that suspension change. The normal reaction is to go with that feeling. I advise that you RESIST that urge. You must hold the steering wheel true to course, like a boat up on plane. There must be some input by you and that is one of the NUANCES of 4-wheeling.

Coming down some steep steps, do you use the lockers? Do you use the brakes? The vehicle lurches into a tire swallowing hole and you - what???

Coming off a down slope and the rig seems like it is going to dive into the terrain, resist the urge to turn out of the turn. Turn INTO the slope, keeping the rig aimed to the downhill fall line. This is especially important when coming off an off-camber turn. Keep the rig aimed down. Once on the level, straight part, then correct the steering to make any turns, if needed. Use small input steering, holding the wheel and not letting the terrain steer you.

Coming off of steep steps, sometimes my ring & pinion is not low enough to creep over the edge. I will (YES) PUSH in the CLUTCH and use the brakes to ease the rig over. The brakes will complain, groan, moan, the rig moving only a MILLIMETER at a time. Don't bounce the rig down with the brakes making the rig rock and bounce. Just VERY, VERY, VERY SLOWLY ease over the edge. SACRILEGE, you say! I say that is another NUANCE of 4-wheeling.

That big 35" tire drops into a hole you didn't see or couldn't avoid. The back end comes up precariously catching air with the possibility of doing an endo! Most common mistake is to hit the brakes thinking it will stop the movement. In actuality it magnifies it immensely creating hazardous and dangerous situations. Coming off that edge causes the front bumper to hit, raising the rear end off the ground, dropping into that hole causing the rear end to lose contact with the ground.

ANTICIPATE the action the rig will make. MOST times it is better to go into the hole and feel the rear end come up, then give it a bit of throttle to help drive the rig through. Right at the POINT OF IMPACT, the NUANCE of 4-wheeling is to let it drive that next foot or so with some strong steering wheel hold and some accelerator power--just enough to keep that rear end down on the ground.

Climbing up White Knuckle or that big ledge, you just hit the gas and hold on. Just go out and purchase the Rick Russell video on Moab for a good show. Wheel standing is fun if you can pay for it or fix it 50 miles from town. Pick your line, discuss it with others, be sensible. Will your rig actually have a chance to make it? The NUANCE is to approach it slowly, nudge the steep slope, use some steering finesse to get the front end up on the rock, follow through with a little throttle to help with some momentum. Let the tires bite a little as you start climbing. Keep sitting back in the seat. Feel the rig as the back tires begin the approach to the slope. A bit more throttle... DO NOT OVERSPIN the tires here. Stay with the line you have chosen. The rig will move around on the edges a little. Be calm and sit in the seat (don't lean forward, it doesn't help the rig). Use the throttle and steering gently to "bump" the rig up.

Know when to say when!!! Sometimes it is not in the cards to climb that slope, hill, giant edge. Leave it for another day. It may just not be possible in any rig this time. Rain, snow, too dry conditions, worn tires, terrain chewed up by the first 25 rigs. There are times I climbed those giant edges and times I haven't. Don't let your ego get the best of you. Enjoy the time out there and come back later. Finish the rest of the holiday in style not grumbling about the broken axle or wheel or neck!! The nuance of hills and the nuance of ego!!

### **The NUANCE of Communication When on the Trail:**

No, not with the CB, but between driver, the navigator and the ground guide. Make sure hand signals are understood. Don't use thumbs for pointing. Keep the thumbs in and use the index finger to point which direction the rig should go. Use a closed fist with downward motion for describing coming off ledges or steps. Let the driver know when they are down by using flat palm wave like the umpire in baseball "safe" signal.

With inside vehicle signals and communication, DON'T use right and left. Use DRIVER SIDE or PASSENGER SIDE verbal commands, or even YOUR SIDE or MY SIDE, especially when backing up. It is very confusing when looking back which is right or left. When backing, use terms to give distance and count down. Like: "Go back 6 feet, 4 feet, 2 feet, stop!" When the driver asks the passenger "how close to the edge are we?" don't say close!! Use feet or even inches or even "the tire is one inch over!" It is not good communication to just say "Come on back" or "Just a little more." Be clear in direction, dimension and decision. This is the NUANCE of communication.

See you in Moab! If you do see me, please come over and introduce yourself. I will be happy to answer any questions or discuss terrain techniques with you. Don't be a stick in the mud!!

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