

# SKIDS TESTED

STEEL, ALUMINUM, HDPE  
WHICH IS RIGHT FOR YOU?



OFF ROAD NAV PT. 2

**EXPEDITION**  
**COMFORT**

**STUCK**  
**HAPPENS!**



# FJC Magazine

July 2008 - Volume I Issue 3

On The Cover:  
Testing all the types of  
skids



## CONTENTS

- 6** Expedition Comfort
- 9** Dirty Toys School : Grand Junction, CO
- 10** Skids Tested!
- 14** 4x4 Navigation Part 2: Hand Held GPS
- 15** Off Road 101: Trail Armor
- 22** Photo Shoot: Team Necessary's "Old Girl"

## FEATURES

- 8** Featured Rig
- 12** Reader Rigs
- 16** WAAG XS Basket Install & Test
- 19** Stuck Happens!
- 35** 2008 Spring Mud Fling
- 36** Upcoming FJ Events
- 37** Thrill on the Hill 2008





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Our goal is to create a resource for vehicle based back country access by the disabled. Our motto is Adapt, Overcome, Explore and we are working to live up to that motto in the following ways:

**Adapt:** Vehicle modifications, equipment reviews, recovery methods, driver training, and more.

**Overcome:** Feature stories of those who are out there already, from amputees to those with spinal cord injuries

**Explore:** Trail ride-along events to introduce the disabled to the outdoors, presenting at land meetings to fight against trail closure, adapted trail guides and more.

For those of you who are currently able bodied, we could use your help with many of our activities while providing you with a chance to learn how to wheel with the disabled. Our desire is not to change the trails that already exist, but to keep them open so that people with mobility impairment can enjoy the same wilderness access that the able bodied have.

To find out how we can help you, or how you can help us, go to our website ([www.disabledexplorers.com](http://www.disabledexplorers.com)), email us at [info@disabledexplorers.com](mailto:info@disabledexplorers.com), or call 602-451-6079.



## From The Editor

It's been a very busy last couple of months for us here at FJC Magazine. In addition to preparing our most exciting issue yet, we've been working hard on the 2008 FJ Summit Event Guide. If you're not able to make it to the Summit this year, you'll still be able to get the Event Guide. During the Summit we'll make it available for download, so keep checking [www.fjc-mag.com](http://www.fjc-mag.com) for the latest updates.

You may have noticed a few updates to the [fjc-mag.com](http://fjc-mag.com) website in the last couple of months as well. We've added a latest news section so you can learn about the newest modifications and accessories for your FJ, and comments are now enabled on some articles. In August we'll be launching an entire new website with more great FJ Cruiser content than ever.

FJC Magazine is also proud to be the sponsor of the up and coming FJ Pedia at [www.fjpedia.com](http://www.fjpedia.com). Wikis are completely user edited and only thrive when users are active. We encourage all of the FJ Cruiser experts out there to join FJ Pedia and share your knowledge. It's our hope that every technical question will someday be answered in the only Wiki dedicated to FJ Cruisers.

Don't forget that you can get a printed copy of FJC Magazine through our online printing partner, [lulu.com](http://lulu.com). The printed versions are really more like books than magazines, so consider getting one of your own.

Until next issue, tread lightly and drive safe!!

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# "EXPEDITION" COMFORTS

*By Lance Blair*

<http://www.disabledexploreres.com>

When the word expedition is used, many people think of grueling treks across the barren Sahara or the wild harshness of the Outback. In reality, overlanding is usually as comfortable as a picnic in your backyard. You have a crisp salad, a cold beverage, a comfy bed, and plenty of time to relax around the fire at night.

space, make a fridge one of the first overlanding mods in many FJs. Still, ice does serve a purpose in camp, for example when making a nice cold beverage. Many refrigerators also feature a "quick freeze" mode that will chill down your fresh re-supplies quickly. Many fridges will do fine with a single battery system, but the wise traveler usually puts in a dual battery. A second battery also aids in other ways like supporting radios, navigation and winching.

**Expeditions should be experienced and enjoyed, not suffered through or survived.**

There are many pieces of equipment that set overlanders apart from the crowd running day trips or weekend jaunts. From the fridge, the roof top tent, to the hot shower at the end of the dusty trail, it is the thought process of expedition travel (and the gear to keep you going day after day) that makes the difference.

A 12vdc fridge is an element of overlanding that really makes a long journey enjoyable. Ice works fine for day trips and weekend outings, however the space lost to that ice, the soggy food, and the need to keep buying more ice just doesn't compare to an on board fridge. Always having cold drinks on hand, crisp veggies, ice cream on a hot day, or the ability to pack more in less





Of course while you are relaxing with that cold beverage, your special someone will find camping a much more agreeable hobby if she (or he) can take a nice hot shower! With the space a vehicle allows and based on the experiences of our brethren in Australia & South Africa, a shower is easily possible. There are options such as engine based heat exchangers, propane powered units, and my favorite, a stainless steel bug sprayer with a RV shower wand. Pop it on the stove or fire for a bit and hot water is ready in no time. I would recommend a shower cabana to keep camp modesty in order, which can also be used to house your portable chemical toilet. A potty solution much improved over digging a hole under a shrub.

With the trail dust showered off, a nice meal from your fridge and a cold beverage to wash it all down, a nighttime luxury calls to you. A roof top tent is a true comfort when camping. With its thick mattress and quick setup (regardless of rocks), ants or other ground issues are of no concern. It also keeps your bedding inside, nice and clean. A roof top tent also makes morning packing a breeze since there is no mud, dirt or other problems when packing it away. There are a number of varieties available to fit the size of most families and vehicle setups.

So far, we have only touched on the aspects of overlanding that involve stopping for the night. What about lunch stops or just taking a break? Does expedition style travel add any comforts for these times? Of course, that's when you deploy your shade awning. Overlanding has its roots in areas like Australia & South Africa, where the blazing sun can make a lunch stop miserable. The idea of an extend able awning works both for sun and rain to keep your mid-day meals or mid-morning stops a pleasure, not a pain.

The list could go on forever, from comfortable chairs, to gear required for that perfect jolt of morning java. But it is the mindset of the overlander that makes the difference. The idea that the trip will be an extended time in the backcountry, and should be experienced and enjoyed not suffered through or survived. While a day trip or weekend can be mucked through with a quick trip to the store, an expedition requires the forethought and planning that ensures no sore backs or soggy sandwiches.

Continued on Page 17





## Featured Rig X 2

For this issue of the magazine, we are fortunate enough to have two amazing FJ's as our Featured Rigs. Air2Air's infamous daily driver / race truck, and Mir's heavily modified BD. We hope you enjoy this double dose of Featured Rigs!

If you've not seen Air 2 Air's rig, we wonder where you've been. This truck is perhaps the most modified daily driver FJ Cruiser around, and it certainly is impressive. The custom paint job, internal roll cage, built in computer, and completely redone interior all jump out at you when you see this truck. Rather than go into a dissertation about the mods, we thought we would print the entire amazing list:

### Armor

- Demello Offroad sliders
- Demello Offroad custom Prerunner bumper
- Demello Offroad aluminum nose and engine skids
- Demello Offroad body mount chop and fender clearancing

### Body - Exterior

- Donahoe Racing fiberglass fenders and hood
- Kartek hood clips



- Summit racing fiberglass scoop
- Body repainted in BMW Topaz Blue
- Custom ABS Mud flaps

Continued on Page 27



Like Air 2 Air's truck, Mir's FJ is a very heavily modified example of what a built FJ Cruiser can become. Mark has had essentially all his work done by Man-A-Fre in Simi Valley, California, and his mode list is very impressive as well.

### Armor:

- ARB front bumper
- AIIPro rear bumper
- MAF/4+ wide rock sliders
- MAF/4+ four part skid trays (three main pieces plus the piece to connect with the ARB)
- Total Chaos front lower control arm skids
- AIIPro rear diff cover
- AIIPro rear shock bottom mount skid

- TLC rear lower control arm mount skid

### Suspension and arms:

- OME heavy front (OMEN140S shocks, OME886 coils) plus ToyTec top plate spacer
- OME extra heavy rear (OMELTR remote reservoir shocks, OME897 coils)
- MAF/4+ rear upper and lower control arms with swivel mounts
- Total Chaos front upper control arms
- Total Chaos front spindle gussets

Continued on Page 28



# DIRTY TOYS SCHOOL

*By Eric Ross*

The first Dirty Toy School was held in Grand Junction, CO from May 16th to the 18th. This one of a kind school brings together Toyota 4x4 enthusiasts from around the country for three days of off road training. World renowned 4x4 instructor Bill Burke, along with Chris Nelson and Dave Logan, pulled out all the stops for this inaugural event.

FJC Magazine Contributor Eric Ross was there and kindly provided this report on the event.

## Day One:

Met a bunch of folks at the Double Tree Hotel in Grand Junction, all with great rigs. Among the notable Toytoa's were Tacos, Tundras, FJ Cruisers, 4Runners, FJ40, FJ55, FJ80 and Bill Burke in a Sequoia. We started off with a great lecture on how different types of gear works (and what doesn't) from Hugh and Jim of Safari Ltd.

We then split into two groups based on modifications and relative experience. Our group (with slightly more built rigs) hit Bang's Canyon and started out pretty mellow with Chris Nelson showing us the ropes. We saw plenty of beautiful flora and fauna and the weather was perfect (in the 70s). Jeremy generated a

little pucker factor in his white Taco learning about vehicle stability, while Jeff T and Chris Nelson showed good spotting on the rocks. I got to be a passenger while Katherine walked the rocks for a while, and then we took turns working on the waterfalls.

Continued on Page 30





# Trail Test: SKIDS

By Shane Williams  
Photography By Angie Williams

When armor modifications were first introduced for the FJ Cruiser, the only option for skid plates was steel. Steel is strong, durable, and has been trail proven for years. If you choose to go with steel, you won't be disappointed. Within the last few months however, several new types of skid plates have become available. Aluminum skid plates from Rasta4x4 promise the same strength as steel at about half the weight. The latest technology, uses high density polyethelene (HDPE) material to deliver the protection you need with light-weight benefits and cost savings. These skids are an affordable alternative, that promise the same protection as the others.

## The question is: How do aluminum & HDPE skids hold up in the real world?

In early June, we gathered a variety of FJ's with several types of skids and modification levels to answer this question. Our goal was simple, determine without a doubt whether or not aluminum and HDPE skids protect as well as their tried and true steel brothers.



## The Test

Keep in mind that every manufacturer is a little different. While we'll discuss installation, service, and support a little, this test was all about performance of the material.

During this test, we covered these aspects of each type of skid:

\*Durability - strength vs vehicle weight and objects, ability to repair (patch or hammer out, etc), corrosion resistance & how it would

affect component life.

\*Installation & RE-installation - ease of handling, mounting & mounting hardware, fit & movement, any suspension or other limitations. Once used, bent, etc. How hard to remove and re-install?

\*Price: Base price and estimated installation time. Install prices and shipping charges will vary.

\*Service: How was the company to work with? Were instructions adequate?

\*How do the skids affect the vehicle? How far do the skids hang down off the frame?

\*Vulnerabilities? Extra holes, items that aren't covered, snag points.

\*Weight - How much will the skids effect the weight, fuel efficiency, and performance of your FJ.

-According to <http://www.fueleconomy.gov>, every 100lbs of weight can decrease mileage by up to 2%





## Test Results

### OEM Aluminum

\*Durability: The OEM aluminum skid is not very thick and is not a tough alloy. Since it's in the front only, it will not protect the underside of the FJ at all. It will not support the entire weight of the vehicle (but it shouldn't have to).

\*Installation: Installation & removal of the OEM front skid is not difficult, only requiring 2 brackets & 6 bolts using existing holes.

\*Price: \$287.50 from TRD Source, but many forum members sell theirs when they upgrade.

\*Service: Toyota dealers will bill about 1 hour of labor to install this skid (check local dealer for rates).

\*How they affect your FJ: The OEM aluminum skid drops the front clearance of the FJ by 2-3 inches. Additionally, the 'shovel' feature on this skid means you could scoop dirt or snow onto the top of it. It's also possible to get the front of the skid hung up on an obstacle.

\*Weight: This skid weighs about 35 lbs.



### Bud Built

\*Durability: These 3/16 steel skids are as tough as they come. They can easily support the entire weight of the vehicle when needed. The skids will bend where not supported with enough repeated impacts. They could be hammered back out to be flat again, but doing so may cause metal fatigue.

\*Installation: Bud's skids bolt up to the FJ using existing holes. There are 5 total pieces: Front, center, rear, gas tank, and crossmember. The fit is very smooth and tight, the only potential snag points are the nuts that hold on the gas tank skid. These are a very well thought out set of skids. The instructions are well done and make installation fairly simple.

\*Price: \$800 for all 5 pieces, \$650 for 4 pieces (without the gas tank skid). Installation should take 1-3 hours depending on ability and available equipment. Installation shops should bill 1-4 hours for installation.

\*Service: Bud is a very well known vendor in the FJ Cruiser community. While he stays very busy, he always has time to help his customers.

\*How they affect your FJ: These skids provide full coverage under the FJ. As a result they can take drop the clearance of the FJ up to 2 inches in some places. Our tester (without a lift) noticed a little more scraping after the skids were installed.

There is a hole in the center skid that allows access to the oil drain plug. The front skid must be removed to change the front differential fluid.

\*Weight: All 5 skids will add about 160lbs to your truck.





# Rick's TRD

Hometown:  
???, CT

Year:  
2007

Color:  
Black (TRD)

Trans:  
Auto

Tires:  
35" Mud Country

Wheels:  
17" Cruiser Alloy  
Commando

Lift:  
6" Rough Country

Lighting:  
LED rock lights

Shocks:  
Bilstein

Front Bumper:  
Lucrum Winch Mount

Rear Bumper:  
Stock

Skids:  
Over The Top HDPE

Rails:  
TRD stock

Winch:  
Warn M8000

Air/Co2:  
10lb Co2

Other Mods:  
Bandi Mount, CAI, Fiskars  
Axe, 2 Wolo horns

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# Stephens Ti - "Tank"

Hometown:  
Charleston, WV

Home Club: Mountaineer  
Off Road

FJ Nickname:  
Tank

Year: 2007 Color:  
Titanium

Trans:  
Auto

Tires:  
33" Nitto Terra Grapplers

Wheels:  
American Racing ATX

Lift:  
6" Rough Country

Lighting:  
2x 50w IPF Driving  
2x 130w Procomp  
4x 50w Hellas Fog

Shocks:  
Rough Country 2.5's

Front Bumper:  
ARB Bull Bar

Rear Bumper:  
Stock w/ S&S Customs  
Bumper Guard

Skids:  
Rough Country

Rails:  
None (but needed!!!)

Winch:  
10,000lb

Rack:  
OEM

Other Mods:  
Cobra 40ch CB w/ Firestick  
Garmin GPS System  
Tinted front marker lights



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13



# OFF ROAD NAV PORTABLE GPS

In the first article of Off Road Navigation, we discussed the need to carry good paper maps with you wherever you go. Paper maps will always be a necessity, regardless of which GPS option you may use, so don't leave home without them.

This time, we'll discuss some of the Portable GPS options available for off road use. Portable GPS's refer to units that can be mounted in the vehicle but are not necessarily permanent. Since there are literally hundreds of options, we narrowed the list of candidates by identifying models that meet these specific requirements:

#1 – Mapping: Any modern GPS that we'll be using in conjunction with paper maps must support maps. We would prefer topographical maps, but this is not absolutely necessary

#2 – Expandable Memory: Maps take up space. A GPS with very little built-in memory and no expansion capability has limited usefulness.

#3 – Batteries + External Power: The unit must use standard batteries, have a decent battery life, and must support an external power supply.

#4 – Price: A portable GPS unit should be able to meet all of our requirements without breaking the bank. While we didn't set a specific budget, cost is considered.

Many current GPS models seem to pack everything into one unit. We believe in a gadget that performs well for its intended purpose and is not cluttered up with 'bells and whistles'. The list of things we don't care about includes:

Voice navigation: It's a nice thing to have, but not necessary for our intended use.

3D views: Again, it's a cool option but is not needed.

Photo viewer, games, mp3 player, etc: These types of features really only clog up the interface and are definitely not needed.

So after looking at all of the requirements, we've come up with the following units to look at more closely. In no particular order:

**Garmin 60csx**

**Delorme Earthmate PN-20**

**Magellan Triton 1500**

**Lowrance iFinder Expedition C**

**Garmin 60csx**

Screen: 1.5" X 2.2"

Display Resolution: 160 X 240

USB Data Cable: Yes

Internal Memory: Routes & Waypoints only

Expandable: micro-SD Card

Battery Life: 18hours on 2 AA batteries

External Power: Yes

Weight: 7.5oz

Price: \$303.31



The Garmin 60csx is a great mid-level mapping GPS unit. Its decent sized screen and large antenna make it a perfect fit for the FJ Cruiser. The good battery life means you'll be able to use it additionally for hiking once you're in the wilderness. Since the 60

series has been around for quite a while, accessories are easy to find and relatively inexpensive. The best thing about the 60csx is that it supports both external power AND an external antenna. This means much better accuracy when in the vehicle. The 60csx (as well as all Garmin's we looked at) also support auto-routing. This feature will enable you to lookup an address (or intersection, or place of interest) and will automatically create the route for you, including turn-by-turn directions.



# Off Road 101

Even when completely stock, the FJ Cruiser is one of the most trail-capable vehicles available. With specs like, a ground clearance of 9.6", approach and departure angles of over 30 degrees, and great suspension flex, there isn't much your truck can't do.

After upgrading your tires and wheels, (see Off Road 101, April 2008) the next addition for many owners is in undercarriage armor. The term 'trail armor' can be applied to many different modifications. We are focusing on two primary trail armor upgrades, rock rails and skids.



The purpose of rock rails are to protect the side panels of the FJ from rocks, stumps, and trees. Rails will also protect the bottom of your truck if you get high-centered on the left or right. The OEM Toyota rock sliders are a very solid product. They are made of thick steel tubing that's heavy, tough, and will work well for most owners.

Virtually every FJ accessory manufacturer builds rock rails of some sort. Most are round, but a few vendors offer square tubing. Round tubing tends to slide better, but square sliders may be easier to jack without an adapter. One of our favorite styles includes a 'kick out' at the rear of the slider. It's meant to push the truck to the side if a large rock or tree is about to take out the rear panel. No matter which type of slider you choose, it's one of the most important trail armor upgrades you can make. Toyota OEM sliders can be found on-line for less than \$300, and after market sliders start at about the same price.

The other major trail armor modification, is a set of skids. Skids attach to the bottom of your FJ, protecting important parts from rocks, roots, and other hazards that can cause significant damage. Skids also minimize the chance that

you'll get 'hung up' and stuck on your frame. They're meant to help your truck slide off of an obstacle, and may hold the entire weight of your truck if you get high-centered. The FJ comes with very thin metal skid plates covering major components. There is a thin aluminum 'bling' skid plate option available as well for the front of the FJ. While these efforts are certainly better than nothing, they do very little to protect the underbelly of the FJ from major hazards.

After market skid plates were one of the first accessories produced for the FJ Cruiser. The initial skids offered by companies such as Bud Built, Man-A-Fre, and All-Pro are all made out of 3/16" steel and are very tough. Each vendor has a little different design, but they all protect the most vulnerable parts of your FJ. In the last few months, there have been a few new products in the skid plate arena (see Skids Tested!, Page). Tough aluminum skids offer strength with less weight, but at a slightly higher cost than steel. High Density Polyethylene (HDPE) skids are very light and relatively inexpensive, but the technology is very new and doesn't yet have a proven track record.

Some will say that skids are the most important modification you can make and we agree. Getting caught up on a root or rock can cause major damage to your FJ and your wallet. It's always better to spend a few hundred dollars on skids so you don't have to spend a few thousand on a transfer case or differential.

When preparing your 'mod list', be sure to include trail armor as one of your top priorities. Your FJ is very capable and can go just about anywhere but think of trail armor as your insurance, to make sure you get home safely.





# New Product: WAAG XS Basket

By Shane Williams  
Photography By Angie Williams

In our opinion, the stock FJ Cruiser roof rack fits the truck perfectly. The only time we have issues with it is when we go camping and would like to put our gear up top. The problem is that the stock crossbars are not very sturdy and leave many gaps in the rack. The plastic attachment brackets are the weak spot, so we dare not load more than the recommended 150lbs on the roof.

The thought of spending over \$1000 for an after market rack that would hold more gear, never appealed to us. Most of the after market racks are built from thick steel, which makes them strong, but not light. With gas prices over \$4/gallon, a 200lb roof rack (before adding gear) wasn't a practical solution for us. We always thought that if there was a basket that could attach to the stock rack, that would be the perfect solution.

Just a few months ago WAAG introduced their FJ Cruiser XS Rack. It was exactly what we were looking for, so we couldn't wait to take one for a spin. The rack is simply a basket that fits perfectly inside the stock roof rack. It arrives as a single piece, (no assembly required) it's a welded steel basket, made of 1" steel tubing. This basket is STRONG, it's light, and it's powder coat finish maintains the original look of the FJ. The front of the basket is sloped and includes 4 front tabs and 2 rear tabs for off-road lighting. Best of all, it's very reasonably priced at \$560.00 + shipping.

WAAG includes 6 brackets to secure the basket to the

stock rack. We used a blanket on top of the FJ to keep the basket from scratching the roof during installation. The fit is a little too tight for two ratchets to secure the brackets down so a box-ended wrench is recommended.

The installation instructions have three basic steps, but could give the installer more direction. A closeup is shown for how the rear two brackets attach, but not the 4 side brackets. We attached the front brackets at a different angle than the others. The vagueness of the instructions allows for some creative solutions, (which many people enjoy) and it's easy to see that it could be a very versatile modification.

The basket rises above our stock rack by about 2 inches at the highest spot. With the basket installed, the FJ still fits in our 7 foot garage, but it is a tight fit.

For FJ's without an OEM rack, WAAG recently pre-announced the XS Replacement Rack. This full rack is



very similar to the XS Rack, but with brackets that allow attachment directly to the FJ along with a few other changes. The availability and pricing for this rack were not available at publication time, but check the WAAG website ([www.waag.com](http://www.waag.com)) for updates.

If you're looking for an inexpensive, yet solid option to store gear on your stock rack, this is a great way to go! Mike Calka and the people over at WAAG have a very well thought out product with a price that's easy on the wallet.

**Vendor**

**WAAG Products**

<http://www.waag.com>





This mindset of extended treks has other positive effects. Things like being conservation minded and a desire for high quality goods that won't fail far from home. A weekend trip can be done easily with paper plates but you have to pack out all that trash. Combined with the desire for a better experience, overlanders tend to look for quality stainless steel or lexan plates, cups and utensils. These options are better for the environment and more convenient than having your dinner land in the dirt as the paper plate falls apart.

Another positive aspect of the expedition mindset comes about over time, as a person understands the benefits of quality goods that won't fail in the field. Tables and chairs should be light and comfortable since you will use them three times a

day for the length of your trek. Also, since less weight means better fuel mileage, lighter materials mean more time staying remote and reduced trip cost. Lanterns that put out enough light and aren't destroyed by rough trail travel are very beneficial. Even something as simple as a nice pillow that packs small but feels full will help a night pass in bliss.

So, the next time you see that 4wd covered in dust, make sure to check out the folks inside. Many times, the way you can tell they're overlanders, isn't the jerry

cans or sand ladders on the outside of the rig but the relaxed smiles on the faces inside, showing that their extended journey was done in comfort & style.

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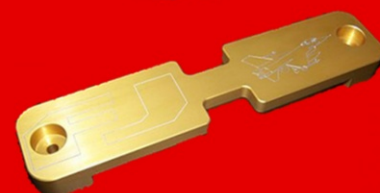
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- Regularly scheduled, well organized runs
- No monthly dues, donations are welcomed
- Promoting the *Tread-Lightly* philosophy
- Support by local vendors increasing daily!
- Parts and MOD install discounts available



# Ellis Precision

## Custom CNC Machining



[www.ellisprecision.ca](http://www.ellisprecision.ca)





If you're looking for a more basic Garmin hand held, the eTrex series is a great place to start. The eTrex Legend and Vista are small mapping hand helds that can be found for less than \$200. Their screen is a little smaller than the 60 series, but it still works well for in-vehicle use. Each of these units can use external power, but there is no external antenna option. We use a Legend every weekend and the 10ft accuracy (in the FJ) is perfect for our needs.

Garmin's latest and greatest GPS devices are the Colorado series. These large screen units include advanced features like pre-loaded topo maps (on the 400t), 3D map views, an advanced "Rock 'N' Roller" navigation wheel, and a picture viewer. While these units certainly are cutting edge, they're definitely overkill for our stated requirements. All these advanced features also come at a price. The 400t lists for \$640, but can be found online for just under \$500.

### Delorme Earthmate PN-20

Screen: 2.2"

Display Resolution: 220 X 176

USB Data Cable: Yes

Internal Memory: 75MB

Expandable: SD Card slot to 2GB

Battery Life: on 2 AA batteries

External Power:

Weight: 5.12oz

Price: \$299

Includes TOPO USA 7.0, \$100 of Aerial Imagery, 1GB SD Card & Reader,

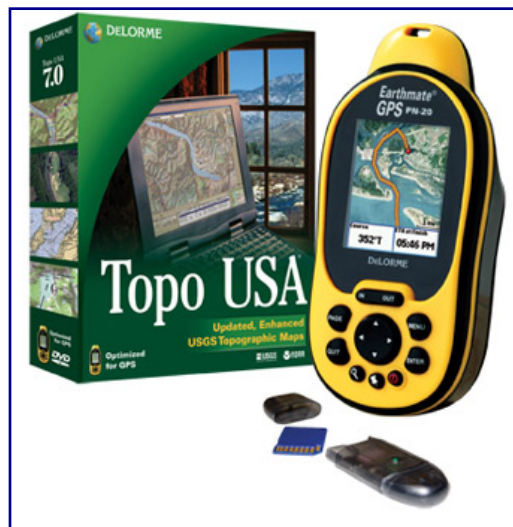
The Earthmate PN-20 is the first (and only) hand held GPS from Delorme, a company famous for their great paper maps and software. This unit has all the features we're looking for, TOPO USA is included, auto-routing is available, it can use external power, and has expandable memory. A recent price drop from \$399 to \$299 has really made this GPS a great choice for on and off-road use.

The most interesting feature of this GPS is the different map types. Right out of the box, you get topo and street maps. And, there is a coupon to try the aerial / satellite maps free with your purchase. The unit also supports NOAA Nautical Charts and USGS 7.5-minute 'Quads'.

Some users have reported that the interface is a little slow and difficult to learn, but it just takes some getting

used to. To setup map packages, you'll use the TOPO USA 7.0 software on your Windows computer (or a Mac running emulation software). This can be a bit cumbersome since you can only fit so much data on the provided 1GB (or upgraded 2GB) SD card. Still, the software is robust, and once your maps are on the device, you can manage your entire trip from there.

If we weren't already heavily invested in our Garmin units, we'd consider this a great option for a hand held / trail GPS. There's no doubt that this GPS is the primary competition to Garmin for on/off-road use.



Continued on Page 26



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# Stuck Happens

By Chris Nelson

<http://www.dirtytoyschool.com>

Picture yourself driving along a trail and enjoying the great outdoors. You turn a corner and come to a difficult section. After a couple tries you manage to get hung up with no ability to drive forward or backwards. What is your next step? There are a few things to consider that I'd like to share.

## Take your time:

It is easy to get caught up in the heat of the moment when you are stuck. You may be worried about your vehicle getting damaged, and people may be frantically shouting advice. This can lead to injury and damage. So, take a break. Realize you are stuck and get out to look. Knowing when to quit is a key element to

vehicles around you.

Dynamic vs. static: Static recovery is a steady pull. Winches and lifting jacks move vehicles statically. Static is good when a vehicle is stuck in a location where clearance is tight. Static tools are designed to stretch minimally for greater control in these tight situations. Dynamic is a yank. This can be helpful when clearance is not a big concern and a vehicle is really buried. This can put a lot of force on equipment and the vehicles involved, therefore dynamic recovery tools are intended to stretch in order to lessen the impact.

## Formulate a plan:

Figure out how and where to move the vehicle.

Use good gear: All recovery equipment should be rated at a minimum 1.5 times the gross vehicle weight rating (GVWR). Use screw pin shackles as opposed to the clip style. The screw pins can tolerate side loading better than the clip type if should they shift during the recovery. Utilize frame mounted recovery points.



preserving your vehicle and the trail. By getting in a calm mindset you are more likely to make better decisions.

## Do a stuck assessment:

Look at all six sides of the vehicle to get a complete understanding of the situation. Sometimes seeing underneath can be a less than ideal task, but take the time to dig it out if necessary and see if you are hanging up on something. This can be one of the best tools in determining what direction to recover the vehicle.

## Determine what tools are available:

Figure out what options you have from the gear and

4WDTA instructor if you are serious about 4 wheeling and want to learn more. Together we can keep trails open for all to enjoy. **FJC**

With these points in mind you will have a better chance of safely getting on your way again. Please treat the trails and surrounding areas with respect and stay where you are allowed to recreate. Seek instruction from an

July 2008



[www.fjc-mag.com](http://www.fjc-mag.com)





## Rasta

**\*Durability:** These aluminum alloy skids are strong. They've proven to withstand repeated hits on rocks, and can support the entire weight of the vehicle easily. They will dent considerably after regular use which may affect the fit upon removal and re-installation.

**\*Installation:** Installation of the four skids (front, gear, transfer, and fuel skids) is fairly straight forward. The skids currently ship with a diagram but no step by step instructions for the FJ Cruiser. However, Rasta4x4 is currently working on step by step set of instructions. Installation should take 2-4 hours depending on ability and available equipment. Installation shops should bill 2-5 hours.

**\*Price:** \$980 for the full set, although group buys can reduce that price.

**\*Service:** Our testers had nothing but great things to say about Rasta4x4. They've even made themselves available on weekends via cell phone for technical support. There is no doubt that these are a quality product with quality service.

**\*How they affect your FJ:** The Rasta skids conform more to the underside of the FJ than most steel options. The front differential vent causes the skid to hang down a little more than some people might be comfortable with. In spots, these skids effect clearance by about 1 inch.

There is a hole in the center skid that allows access to the oil drain plug. The front skid must be removed to change the front differential fluid.

**\*Weight:** The full set of Rasta skids add about 84lbs to your truck.

## Over The Top

**\*Durability:** After getting these skids installed, we could tell they were strong so we couldn't wait to get them on the trail. During our test we put these skids on the same obstacles as all the others. In fact, our FJ was the only one to get fully high-centered on the dirt burm we were using for the test. All four wheels were spinning before we were recovered.

After being pulled off the burm we checked for damage. The only thing we saw was a few scratches to the shiny black skids, and a VERY slight bend right in front of the crossmember. We can safely say that these skids will support the weight of the truck.





\*Installation: The installation of our pre-production set of skids falls into the 'moderate' category. These HDPE skids come in 2 pieces and include a new crossmember. The front skid starts from just behind the radiator and ends at the transmission crossmember. The rear skid starts from the transmission crossmember and covers all of the gas tank. While the front skid uses all stock bolt holes, the rear skid requires some drilling. We drilled three holes in the front crossmember, and 4 additional holes to secure the new crossmember that came with the skids.

The key to a painless installation is drill bits. We purchased 1/4" and 5/16" cobalt drill bits, which worked wonderfully. The manufacturer is considering including drills bits in the kit. Installation should take between 3-4 hours. Installation shops should bill 2-5 hours.

\*Price: \$550 + shipping for complete front to rear coverage.

\*Service: We have nothing but great things to say about Rick (Capt. Rick), he pioneered these skids from his own need. And Over The Top Skids were born. His instructions were well thought out, and right on the money.

\*How they affect your FJ: These skids 'hug' the bottom of the FJ better than any others we tested. The skids are 1/2" thick, which is all you lose in clearance. Our pre-production skids did not have an oil drain hole or ventilation holes on the front skid, but Rick has said that the production units will include these features.

\*Weight: These skids with all hardware and the beefy crossmember weigh in at about 50lbs.



Every skid we tested performed very well so it really comes down to personal preference. Which skid is best for you will be determined by budget and use. If you intend on pushing the limits of your FJ on difficult and rocky trails, steel or aluminum may be the answer for you. Many owners wheel more 'casually' and would prefer not to add that much weight to the truck. For these drivers, HDPE is a great choice that provides excellent protection. Be sure to check out [www.fjc-mag.com](http://www.fjc-mag.com) for all the pics from our skid comparison.



#### Vendors:

**Rasta 4x4**

<http://www.rasta4x4usa.com>

**Bud Built**

<http://www.budbuilt.com>

**Over The Top Skids**

<http://www.overthetopskids.com>

**FJC**



July 2008



[www.fjc-mag.com](http://www.fjc-mag.com)







Team Necessary finished a team best 3rd place in the 2008 Baja 500 in Ensenada Mexico. Taupo 1000 class winner Ryan Millen joined the team as co-driver for this event. Team Necessary has really shown what dedication, perserverance, and hard work can accomplish. On the following pages you'll find photos of 'Old Girl' along with a mile-by-mile narrative from Kevin Necessary himself. Enjoy!

Ryan started, had a great steady pace, the course was very tough and we knew at least 1/2 of the field would break.

He was pit at race mile 79. A splash of gas, repaired the exhaust, drinks, inspection.

At race mile 94 he got a puncture in the right rear, he had a spare but we took some extra time bringing him another tire because he was just about to ascend the "summit" which is very hard on tires and no way in for the chase teams.

At race mile 150 the engine dies, thought it was a fuel pump problem, lots of trouble shooting, engine starts and immediately dies. Turns out he tore off the intake and the mass airflow sensor was malfunctioning. Put the intake back on and was off. These two stops but us an hour + back.







He pit at race mile 205. Massive inspection, full fuel, took on two new tires, this is where I got in. Pit took 15 minutes. At this point we were tearing gaps in the front core support and the fan was hitting the shroud, We were having problems with our transfer-case as well. We tried to bandade everything up as much as possible.

At race mile 235 our main nav went out. Our back up is a hand held with a 2.5 inch screen, you can imagine how difficult it would be to try and read this at race speed.

At race mile 290 we got radio we were only 10 minutes behind the Honda Ridgeline team and we were flying. It was pitch black out we were hauling ass over a fire road with sheer cliffs, about a 200 foot drop on the side, The surface was real chewed up from the trophy trucks which leaves a hard packed surface with millions of marbles on top.

After I heard about the Honda I almost lost it down a long straight with a 90 blind left. We were doing around 85mph with the rear pitched out over the cliff, some how gathered it up after a small on camber burm lead me through it. This slowed my pace down for a few minutes (we could have been killed).



3



We pit at race mile 307 ,fast stop, splash of fuel, adjusted our HID's and off. At this point we were 8 minutes behind the Honda. At race mile 360 our back-up nav went out. We were following coarse markers and the stars racing along the pacific coast.

Race mile 390 we were in a silty wash with cliffs on both sides, we came up to a wreck, one class 5 upside down in middle of the coarse and a class 1600. There was an injury and we couldn't get around the wreck



In the end we broke off our exhaust, bent both spindle uprights, bent the left lower A-arm, blew out the triple by-pass on the front right and the rear left, blew out the brake lines on the front, tore the core support, lost the transfer-case, tore off the front fenders, lost our nav, lost our backup nav, broke our on board jack, broke 2 HID's, broke off the fan shroud, tore up the rear skid plate, rear end is leaking, bent one lower control arm, put a nice dent in the fuel cell, and broke a grade 8 seat belt **FJC** bolt!

Article & Photos by Kevin Necessary & The Necessary Team

<http://www.necessaryphotography.com>



July 2008



[www.fjc-mag.com](http://www.fjc-mag.com)



### Magellan Triton 1500

Screen: 2.7" Touchscreen

Display Resolution: 240 X 320

USB Data Cable: Yes

Internal Memory: 128MB

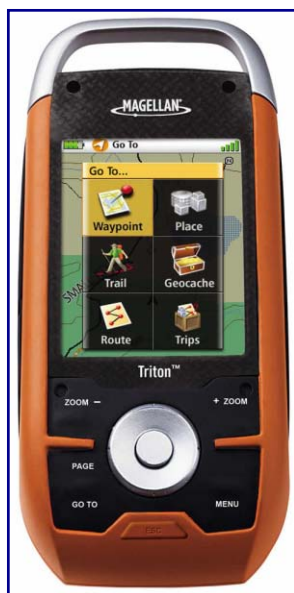
Expandable: SD Card

Battery Life: 10 hours on 2 AA batteries

External Power: Through USB cable

Weight: 8oz

Price: \$324.74



The Triton series is the latest generation of hand held mapping GPS units from Magellan. These devices include many cutting edge features, embedded microphone for recording, LED flashlight, touch screen display, and an SD card slot. The 1500 is at the higher end of the Triton series, so it comes with a full 128MB of internal memory and great 240 x 320 screen resolution. The Triton series does not currently support auto routing, but may in the future (the Magellan website is not clear on this). For

topo maps, the 1500 is compatible with National Geographic's TOPO! software. (See below)

If you're looking for a less expensive option, the Triton 400 can be found for less than \$200 on-line. You'll give up the larger memory (the 400 only includes 64mb) and you'll get a smaller 2.2" screen that's not a touchscreen. The 400 is compatible with Topo! and also has an SD card slot for additional storage.

To go a little higher end, the Triton 2000 adds a magnetic compass, barometer, and built-in speaker to the 1500's features. It also includes a digital camera that automatically geo-tags your photos. These extra features add about \$100 to the price of the unit, but are not what we would consider 'necessary'.

We'd like to note that we've not had a chance for a hands-on test with the Triton series. The features seem full and well thought out, but the reviews on line have not been stellar. Many users have noted that this series suffers from 'slowness' and random crashes on the 400. The 1500 is rated slightly higher, with the only major issue being the frustration with TOPO! maps integration.

Continued on Page 32

## Dreaming of your next adventure?



### We sure are.

The Toyota Land Cruiser Association is a club dedicated to bringing Toyota 4-Wheel Drive enthusiasts together. Visit us at [www.tlca.org](http://www.tlca.org) to learn more.



TLCA membership includes a subscription to **Toyota Trails** magazine, featuring in-depth tech and trail articles, event listings, TLCA merchandise and Land Cruiser classifieds.

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### Body - Interior

- Demello Offroad custom full cage and body gussets
- Kartek tube pads
- Second Skin Damplifier Pro insulation throughout
- Second Skin Overkill headliner
- BS Sand Baja series extra deep suspension seats
- Custom seat bracketry using factory rails
- Crow 4" racing 4-point harnesses

### Communications

- Galaxy SSB/CB radio
- Garmin 250 Dome GPS antenna
- Powermax 5W Cellular signal booster
- Powermax Dome Sirius antenna
- Verizon cellular air card
- Galaxy Universal frequency counter
- K40 Superflex CB Antenna
- All-Pro Bandi-mount CB mount
- Valentine One radar detector

### Computer

- Motion Computing LE 1200 Tablet PC
- Software: Google Earth, EarthBridge
- Homemade welded computer mount
- Portrex aluminum mini keyboard
- Motion USB 4-port hub

### Drivetrain - Front

- Total Chaos front spindle gussets
- ARB front locker
- 4.56 Precision Gear

### Drivetrain - Rear

- Currie 9-plus Heavy Duty axle housing
- Currie Extreme Duty FJ 35-spline axles
- Currie Ford 9-inch third member 4.56S ratio
- Currie Nodular Iron race case
- ARB rear locker



### Electronics

- Garmin 76CX GPS w/USB
- Innovate XD-16 Air/Fuel gauge
- ScanGauge II
- URD Mass Air Flow Fuel & Timing Calibrator

### Electrical

- Battery relocated to rear cargo area
- Kicker 1 gauge cables and fuses
- Blue Sea fuse blocks
- Blue Sea power tap and bus bars

### Engine

- URD 4.0 Liter 1GR Supercharger
- URD Supergrip 33mm pulley
- URD 7th injector fuel upgrade
- URD custom ECU mapping
- Denso Iridium plugs
- Amsoil Nanofiber dry filter
- IPT High-performance transmission valve body
- Amsoil Synthetic 10W-30





### Lockers and gears:

- Inchworm dual transfer case (twin reduction boxes 2.28:1 and 5.7:1) part time 4wd
- ARB front air locker
- QuickAir 3 drives air locker (and works as a tire inflation backup)
- ATRAC/elocker hack

### Roof:

- Cowboy 4x4 front light rack
- Garvin "adventure" rack front roof rack tray
- FourTrek shovel and axe mounts
- Blitz jerry can mounts
- Custom sand ladder mounts
- Demello HiLift mounts

### Wheels/tires

- Interco LTB 34x10.5x16 on Procomp 87
- Pitbull Rocker 33x13.5x17 on custom Stazworks dual beadlocks
- BFG AT 295/75R16 on Procomp 152
- Spidertrax 1.25" spacers all round







#### Random Mods:

- MAF auxiliary fuel tank
- MAF custom dual battery (yellow optimas)
- SwissArmySUV dome/map light
- ARB fridge on Engel mount tray in back
- 15lb CO2 tank and mount in back
- Cobra 75 CB
- Garmin 376c nav
- Snorkel
- Removed front fender flares and mud guards, body mount chop



**www.fjcruiserquebec.com**

Le seul club francophone de FJ Cruiser.



The only french speaking FJ Cruiser club invites all FJ owners to come ride with us and discover our beautiful province.



#### Recovery:

- Warn winch mounted in ARB front bumper
- HiLift, shovel, and axe on roof
- PullPal

Mir will also be at the FJ Summit, we can't wait to check out this rig in person!

July 2008



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## Day 2:

Bill Burke stretched us out on some arroyo in the 29 Road OHV area. We all learned a great deal about the off-camber abilities of our rigs, some better than others. I learned that steep descent + poor approach angle + too much weight + aired down tires + turning = blown tire bead; but talk about team work! My FJ was Hi-lifted, bead reset and back on the trail in about 10 minutes. We did some really cool and difficult work through the arroyo, learning about tire placement and the importance of rear axle travel. We stopped for lunch here because my passenger sway bar link snapped. It peeled off the CV boot and punctured it, so we had yet another trail repair on my rig. Don G and Bill Burke helped me yank the stabilizer and links, and got the damaged boot seated with a hose clamp (this is the second time this has happened to me so I was relatively prepared).

We learned a great deal about vehicle dynamics, mechanical sympathy, communication, proper use of the



**Bill Burke shows the proper way to jack with a Hi-Lift**

vehicle and its tools. We also became very proficient on the use of the Hi-lift for lifting and winching as well as proper use of a winch, and much more. Bill, Chris, Dave, Hugh and Jim were all excellent hosts! As always, it was really cool to spend time with folks on the trail, and this group was exceptional.

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<http://www.coloradofjs.com>



### Exhaust

- Doug Thorley headers
- URD competition FJ Y-pipe
- URD custom mandrel 3" straight exhaust
- URD oxygen sensors

### Lighting

- Lucrum LLS automated light system
- (8) PIAA 500 6" lights with HID upgrade
- Headlights HID upgrade
- Cheap "Dot it" interior lights

### Safety

- Pains Wessex EPIRB aircraft beacon
- Harbor Freight compressor
- ARB compressor
- Oasis Trailhead deflators
- Fire extinguisher
- Optima 2300 Dry Cell battery



### Suspension - Front

- Total Chaos Long Travel front suspension
- Total Chaos extended front drive shafts
- Fox Racing 2.5" triple bypass shocks
- SwayLOC dual rate off road sway bar
- Demello Offroad custom front hoops

### Suspension - Rear

- Donahoe Racing Signature shocks
- Donahoe Racing Chubbies jounce shocks

**If you get the chance to run with Air, try not to drool on the electronics. We look forward to seeing this truck hands on in a few days at the FJ Summit.**

**FJC**



### Shoes (Wheels & Tires)

- Nitto Terra Grappler 325/65/18 tires
- American Racing Chamber Teflon 18" wheels
- URD/StopTech 355mm big brakes
- Gorilla lug nuts

### Stereo

- Eclipse AVN50
- MB Quart Q-Line 3-way and 2-way drivers
- (2) Alpine PDX 380W amplifiers
- (4) MB Quart reference crossovers
- (2) JL Audio 10" subwoofers
- (2) custom rear shelf subwoofer boxes





## Lowrance iFINDER Expedition C

Screen: 2.8"

Display Resolution: 320 X 240

USB Data Cable:

Internal Memory:  
Routes & Waypoints only

Expandable: micro-SD Card

Battery Life: 14 hours on 2 AA batteries

External Power: Yes

Weight: 8.6oz

Price: \$252.98



Lowrance is a well known fishing sonar and marine GPS unit, and we've seen great implementations of the Baja 540C, but their hand held units are not as well known. We took a look at the iFinder Expedition C device and were pretty impressed. This GPS has the largest screen of the ones we looked at (other than the 400t), and at around \$250, it's a pretty good deal. The Expedition C includes several great features including an electronic compass, barometer, and altimeter (with weather predictions); a built-in microphone & mp3 player; and an SD card slot. It also can use both external power and an external antenna, making this the most versatile unit we've tested for the price.

The iFinder series has had very good reviews from the beginning. The GPS performs great, but little things tend to add up for the Lowrance. For example, the iFinder series does not connect directly to a PC, you have to use the SD card to load your maps & way points. The issue here is that you also have to use Lowrance specific card reader, and only certain cards can be 'authorized' to use their maps. Additionally, the Lowrance units don't support auto routing.

A less expensive iFinder option is the H2O C, which includes all the features of the Expedition except the compass, altimeter, and barometer. The H2O C can be found on line for around \$200.

The only upgrade to the Expedition C is the Hunt C, which increases waypoint storage to 2,000 (from 1,000), and adds hunting-specific icons. These additional features will cost you about another \$60 from various on-line stores.

## Mapping Options

Every hand held GPS unit comes with a 'base map' that usually includes interstates, some exit information, major bodies of water, and that's about it. You'll definitely want to purchase extra maps for any unit you decide on. If you need street maps and topo maps, you may end up buying two sets of maps, which can add \$200 or more to the price of your GPS. The only exception to this is the Earthmate PN-20, which includes TOPO USA and street level auto routing.

## Garmin Topo 2008

The Garmin Topo software covers the entire US (and parts of Canada) and runs about \$100. These maps include points of interest, but only include zoom to about 100,000:1 scale. While this scale is OK for most uses, it's not the best for off-road and hiking. Garmin does offer a 24K series that covers most of the National Parks. Of course most FJ owners don't go wheeling in National Parks so those maps don't help much.

Luckily the Garmin community has made many tools available to create your own maps. We've successfully



created custom topo maps covering the western 2/3 of Colorado and some of eastern Utah (to include Moab). We made the maps about 24,000:1

resolution using the latest free data from the USGS, the State of Colorado, and the USFS. Our full set of maps is a little over 1Gb in size and comes in very handy. The procedure is quite technical, but is possible. We followed the directions from this site:

If you're not technically inclined, a Garmin enthusiast has created very similar maps that include many POI's for several states including: Colorado, Utah, Montana, Wyoming, and some ORV trails in Minnesota. The best part is – they're completely free!

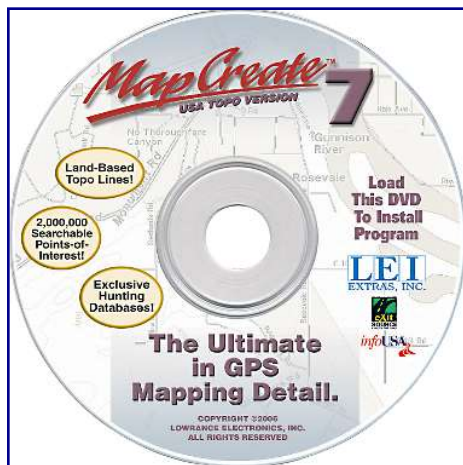


## Magellan Triton + National Geographic TOPO!

Magellan has teamed with National Geographic to enable direct import of Topo! maps into Triton GPS units. Topo! includes seamless USGS maps of the entire US and enables many great features such as customized maps, elevation profiles, millions of POI's, and map printing. Many of these features transfer right over to the Triton. You basically select the area you want on your computer, and export the Topo! maps for that area directly to your Triton GPS unit.

## Lowrance MapCreate 7 TOPO USA

Lowrance MapCreate 7 offers excellent topo maps for their iFinder units. The software includes over 2 million points of interest, public hunting areas for 46 states, game management units for 22 states, and national forest &



national park boundaries. All these points and features are fully searchable on the unit. It also includes all interstates and local/state level streets. The software itself is fairly easy to use, but the lack of GPS connection to the computer means that it could be a little cumbersome to transfer data.

When the time comes to choose your GPS unit, factors such as cost (including maps), unit features, performance, and ease of use will all determine which brand is best for you. Garmin is one of the oldest in the business and is second to none for performance and reliability. Magellan and Lowrance both work well and are very cost effective. The Earthmate unit certainly packs in great features, and included maps is a definite plus. In the end we chose Garmin and Delorme as our picks for FJ Cruiser owners, but we'd love to hear what your GPS solution is. Visit [www.fjc-mag.com](http://www.fjc-mag.com) and let us know what you think! **FJC**

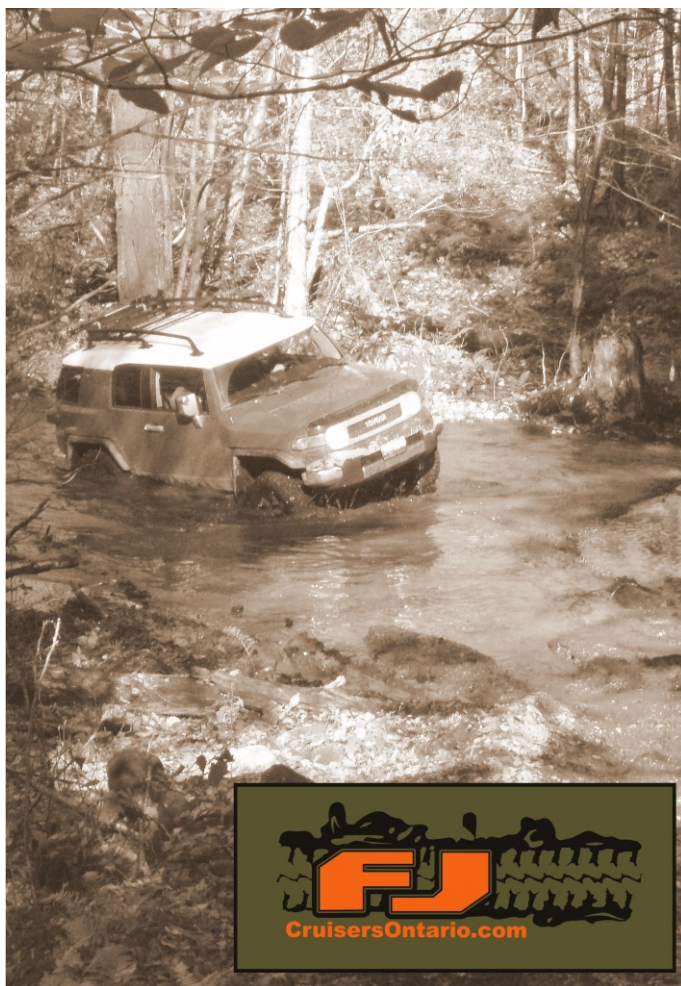


## The NON Club

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## AZ FJ's

<http://www.azfj.org/>

## Aloha FJ's

<http://s6.invisionfree.com>

## Colorado FJ's

<http://www.coloradofjs.com>

## SoCAL FJ's

<http://www.socalfj.com>

## FJ Bruisers

<http://www.fjbruisers.org>

## Sin City Wicked FJ's

<http://www.sincitywickedfjs.com/>

## FJ's Ontario

<http://www.fjcrusersontario.com/>

## FJ's Quebec

<http://www.fjcruiserquebec.com/>

## NWFJCC

<http://www.nwfjcc.com/>

For more Toyota and FJ Cruiser groups and clubs, visit [www.fjc-mag.com](http://www.fjc-mag.com). Look for the FJ Groups & Clubs link.

The poster features a circular logo at the top with an American flag motif and the text "FJ BRUISERS EST. 2007". Below the logo, the title "FIRST YEAR RUNNING THE MUD AND HAVING FUN" is displayed in a stylized font. The main content is divided into two sections: "TRAIL RUNS & EVENTS" and "WRENCH SESSIONS". The "TRAIL RUNS & EVENTS" section includes a map of the United States with callouts to various events: "SPOUSAL UNIT BOUNCE AND JOUNCE" (near the top left), "SAND IN MY ASS-A-TEAGUE" (near the top right), "MUDFLING" (near the bottom left), and "BRUISERS ON THE BEACH" (near the bottom right). The "WRENCH SESSIONS" section shows two line drawings of FJ Cruisers, one labeled "4x4" and the other "4x2", with small photos of people working on the vehicles. At the bottom, the text "LEARN AND JOIN IN @ FJBRUISERS.ORG" is written in a bold, yellow font. On the left side of the poster, there is vertical text: "© 2007 - 2008 FJ BRUISERS - WWW.FJBRUISERS.ORG" and "ARTWORK BY JOSH 'WALRUS' COLLIN".





From Trevor Criste (Mudhole Metallic)

This trip was one of the better if not the best offroading trips I have been on. What made this trip so great for was not necessarily so much the offroading, but the company that surrounded it.



FRI

DAY: I rolled into KOA Friday around 3:30 not knowing what to expect at all. The campground was very nice, incredibly clean and well kept . I brought my dad (who was a complete bruiser noob), he didn't really know what he was getting himself into. After unpacking and setting up camp we all ended up gathering throughout the night at pat's lot to hang out and share our stories around a mini fire. Josh the told us that we needed to meet in the KOA lot ready to go at 7:45 Saturday morning.

SATURDAY: We all assembled in the KOA parking lot sharply at quarter till 8 with the exception of our trail leaders, gunners and the Trail Team (BIG THANKS TO THEM). We rolled out the convoy to Riven Rock Park which, is about 30-45 minutes from the KOA, but was the perfect meeting area/base camp. It's also on the edge of GWNF and no more that 10 minutes from the various trails. We arrived as a convoy through the front gates of Riven Rock and were greeted by the trail team and the registration crew (BIG

THANKS ARE ALSO IN ORDER HERE) where we signed waivers, signed up for the trail runs for the next two days, picked up a packet for stickers/sponsors, an AWESOME trail team grille badge, and a LOT of trail team swag.

After the first trail run was done everyone met back up at the park for a free cook out lunch from one of the 'Fling sponsors, 4X4 connection. After lunch we met up with our trail group for the afternoon run which went very smoothly. Later we returned to the park to help break down the pavilion to return to a evening at KOA filled with great company and better stories!

SUNDAY: Again got an early start to the base camp at Riven Rock where we set up the FJ's (and 4-Runner) for our group picture before the 10 am run. Today lunch was on our own and the our group ate on the trail (Flag Pole Knob) since it's a 4hr+ trail. In the afternoon most went on a staggered group run to salt shed and I had to get home.

THANKS TO EVERYONE WHO DONATED THEIR TIME WE ARE SO LUCKY TO HAVE SUCH AWESOMEPEOPLE IN OUR CLUB.

-Trevor



Photo by Vaughn Ripley



# FJ Cruiser Events

## 2008 FJ Summit

Dates: July 16-20

Location: Ouray, CO

Contact: <http://www.fjsummit.org>

## Black Hills Cruiser Classic

Dates: July 16-19

Location: Deadwood, SD

Contact: [http://www.dakotacruisers.com/bhcc\\_info/bhcc.shtml](http://www.dakotacruisers.com/bhcc_info/bhcc.shtml)

## TTORA Takeover

Dates: August 8-10

Location: Harland, KY

Contact: <http://www.itzoe.net/takeover/>

## Rising Sun Rally

Date: August 9th

Location: Denver, CO

Contact: <http://www.risingsun4x4club.org/default.asp>

## Tall Corn Cruiser Classic

Dates: July 22-24

Location: Knoxville, IA

Contact: <http://www.tallcorncruisers.org/tcc/>

## Taconite Trail Ride

Date: September 19th

Location: Gilbert, MN

Contact: <http://www.taconitetrailride.com>

## Crusin the Woods 2008

Date: September 27th

Location: Tillamook State Forest, Browns Camp, Oregon

Contact: [http://www.cascadecruisers.com/ctw2008\\_Final.pdf](http://www.cascadecruisers.com/ctw2008_Final.pdf)

## Flat N Nasty w/ Tornado Alley Cruisers

Date: October 2-4

Location: Salem, MO

Contact: <http://www.tornadoalleycruisers.com>

**FOR THE LATEST  
INFORMATION,  
VISIT [WWW.FJC-MAG.COM](http://WWW.FJC-MAG.COM)  
AND CLICK ON  
EVENTS CALENDAR**







**By Brandon Burling, Desert Sun Toyota**

Because of the trails being shut down in the Lincoln NF, we traveled to Orogrande (a mining town) and Tularosa for our trail runs. There were over 100 people with about 40 FJ's, 4 Land Cruisers and 11 FJ-40's at the event.

Friday night (for those that made it in) we ran a parade run through the town of Ruidoso, it was a awesome sight. Saturday morning we departed to Orogrande to hit the trails. There was nothing too difficult, but some great views and some different scenery for those not from around here. On Saturday night at the camp ground, the Trail Teams cooked everyone burgers and brats. They had plenty

of goodies to give away and performed some great demonstrations. Mark from Metal Tech also did a great demo on how to break and reseal a bead while on the trail using a Hi-Lift jack.

Sunday morning we had two groups leave at separate times to go to Coyote Canyon in Tularosa. There were some great runs over there. We only had one issue when one an FJ broke its differential. Sunday night we had Can't Stop Smokin bring out the best BBQ in this part of the country for everyone. Then The Rich Shorne Band played a great set for everyone. We handed out lots of raffle items during their performance.



Many thanks to our great sponsors for making this event a huge success:

- Mark from Metal Tech who flew in from Oregon to attend
- Jason Demello from Demello Offroad drove out from SoCal
- Jon from AllPro Offroad made the journey as well
- ICON
- Toytect Lifts
- Desert Sun Toyota
- Toyota Trail Teams
- KIDX 101.5

-and of course [www.fjcruiserforums.com](http://www.fjcruiserforums.com).

I look forward to doing this next year and hopefully the trails will be open.

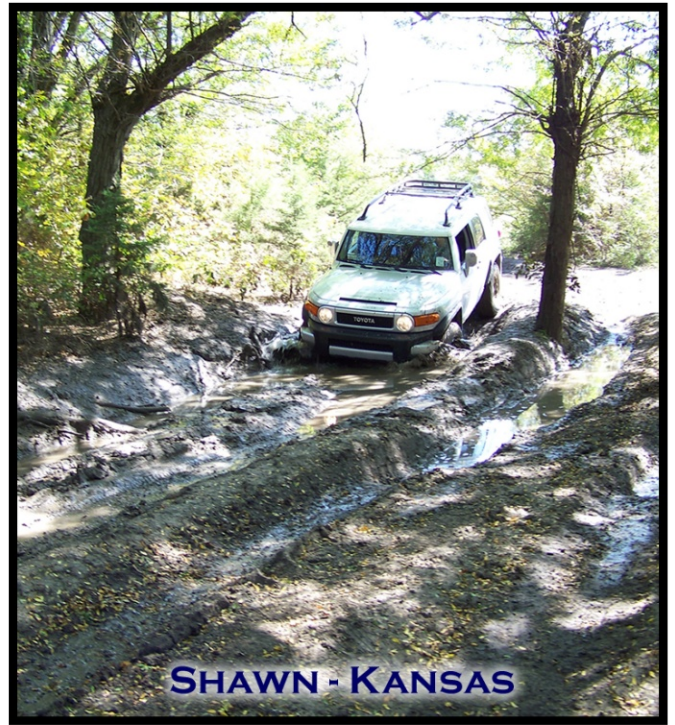




# FJ Nation



PAUL - NEW MEXICO



SHAWN - KANSAS



DOMINIC - SoCAL

Have a great pic of your FJ? E-mail a high-res version to  
[pics@fjc-mag.com](mailto:pics@fjc-mag.com)