

Utah Sport Bike Association PO Box 27072 Salt Lake City, Utah 84127 Fax: 866-720-1050

Dear new UtahSBA racer:

Utah Sport Bike Association is dedicated to safety, education, performance and racing. This document is aimed at giving new racers the information they need to have a safe and successful first year in the Masters of the Mountains roadrace series at the amazing Miller Motorsports park in Tooele, Utah.

The following notes are from Jerry Hicks #527, our 2010 Novice GTU Champion. Having little roadracing experience, Jerry came out with a plan, the skills and focus needed, and the dedication to bring home a championship his first year. We want you to learn from his successes and problems. We've also included the curriculum from the New Racer Certification (NRC) class, track maps, notes sheets and suspension tips. Most importantly, study the rulebook before your NRC. The rulebook can be downloaded at www.utahsba.com/racing.

UtahSBA is thrilled to introduce the economical RacingExperience program for 2011, giving riders the opportunity to try racing in a streamlined, one-day format during Masters of the Mountains roadracing weekends. Priced at just \$200, the program includes a New Racer Certification class, practice track time and finishes the day with race-start practice and a mock race. RacingExperience also allows for "track day" preparation requirements, giving street riders a taste of competition without the expense of a fully race-prepped motorcycle.

Now get out to the garage and start getting ready!

Kory Cowan

UtahSBA President

Are you interested in racing?

A Letter to a New Racer

By Jerry Hicks, #527 2010 Novice GTU Champion

I expect you're reading this because you're interested in racing (call it a guess). That's good. I'm glad you're interested and have taken the step to tune in and read this note, because the first step to racing is admitting you have a problem... err, passion. I mean passion. Yes, the first step in racing is having a passion for the sport. In fact, passion is probably the only, absolutely universal characteristic of any racer's race program. Bikes differ, tires differ, budgets differ, but every racer out there is passionate about two-wheels and going fast on them. That's why I'm writing this letter and the related documents. After many years of wanting to race for

real, last year (2010) I took the plunge and the decision resulted in an amazing first season that was one of the best experiences of my life. The following is what I learned; I hope it helps you take the steps toward joining us on the track and learning about yourself and your machine in the coolest form of competition on the face of the Earth.

Budget

Since the biggest conspirator against your racing program (for most people anyway) is money, let's talk about that first. Yes, this sport is expensive—almost foolishly so at the basic level and disgustingly expensive at the high level. If you ask what most racers' budgets are, you'll probably hear, "All of it". However, that's not to say you need to be crazy-rich to be competitive and have a good time. You just need to spend your money wisely and (depending on how much you've got) possibly make a few lifestyle changes. The latter will be easy once you get on the racetrack because after a few laps that big-

screen LCD TV you've had your eye on doesn't seem so necessary anymore. You might want to include your significant-other in this initial budget/planning phase. Or not.

Once you figure out how much you're going to spend on racing, you should start thinking about where to spend it. The four main components of your racing program will be safety equipment, a motorcycle, track time, and tires. You may also spend a chunk on transportation if you're coming in from out of state, but you might be able to minimize this if you hook up with others in your area and share gas money. Your priority should be to get the best safety equipment you can afford. Now that doesn't mean a \$1K racer replica Arai helmet, but you need to get stuff that will keep you safe on the racetrack and this usually means mid-high end stuff.

Education and track time

Once you have the gear sorted out, budget for as much track time as you can afford (from a scheduling and financial scenario). Commit to running the entire season of racing and as many trackdays and schools as you can fit in (ideally it'd be all of Apex track days if you can swing it or Friday MMP trackdays adjacent to race weekends if you're from out of town). Track time and schools are best performance modification you can make to your racing program. Read that last sentence again.

Another significant budget item will be how many tires you

will buy. This can range from a few months per set of tires, to a few sets per month; and depends very much on how fast you are. Get to know one of the trackside tire vendors and listen to them. If they say you need tires, buy them. Running "take-offs" (which are basically tires used only for a session or so by super fast guys) can save you some coin, but new tires are a lot cheaper than rebuilding a motorcycle after a fall.

Motorcycle

Lastly, let's talk about the bike. Ironically this is probably the least important part of a successful first season. An SV650 or one of the Japanese 600cc 4-cylinder bikes are probably your best option and easiest to come by. Both have their advantages, so take your pick. Then you need to figure out if you're going to buy a used racebike or convert a streetbike. Buying a used racebike is usually a better option, but converting a streetbike can be done reasonably if you make the effort to hunt for deals. The bottom line is, keep it simple. Most modern sportbikes will be more than adequate in bone-stock trim. Most of the front runners in the Novice Classes



are on bikes with stock motors and stock suspension. All you really need to do to any bike is make sure it complies with the rulebook, get a few spare handlebars and foot pegs, then race it. The one thing I would recommend is a visit to a trackside suspension guy. He'll help you get the bike setup and advise on any suspension mods that might be necessary.

Focus and mental preparation

Something that is often overlooked when people get into racing is the mental preparation and approach. You could argue this is the most important component of a successful racing program. Racing is dangerous and, if it costs a lot of money to do correctly, it costs WAY more when done incorrectly. The financial and mental costs of frequent crashes are major setbacks in your progression—not to mention they can kill you. Fast lap times don't come overnight, but rather they take careful attention to the individual components of you and your machine. Body position, reference points, and racing lines are a few things to understand, but knowing your limits and how to slowly explore those limits will lay the foundation for progression. It should feel easy. Just like a drummer doesn't get better by hitting the drums harder, you don't get faster by riding harder. Try to think about focusing on a smooth, repeatable lap before trying to push anything faster.

Motorcycle racing is never going to be safe, but approached

with respect and humility the odds of getting faster and having the time of your life (without getting hurt) are in your favor. Besides, it's still a lot safer than racing on public roads or in the canyons. You will not be the fastest rider out there- the key is to not try to beat the faster riders, but learn from them. Once you understand what they're doing, beating those riders will come naturally. This year UtahSBA has provisional novice mentors. New racers will be paired with an expert for their first two rounds to help them learn the ropes. Take advantage of your mentor and ask questions. We want you to have a successful first season, plus, racing is a lot more fun when you don't fall.

THE STATE OF THE UTAH SPORT BIKE ASSOCIATION

Make friends that the track

A few final recommendations: Get to know the trackside vendors, other racers, and your mentor. There is a very willing and enabling... I mean willing and helpful support group at the track, so get to know them and take it all in. Also, make sure you come prepared. I can't overstate this. Whether you're attending your NRC, first race weekend, second race weekend, trackday, or whatever. There's a ton of stuff to do and keep track of—make sure it's all done weeks before you're supposed to be at the track. Trust me, you'll need those weeks.

Now go get planning and follow your passion for two-wheels with us on the racetrack. I and the rest of the club hope to see you out there next season.

Cheers, Jerry Hicks #527

What you'll need

*means you gotta read the rulebook to make sure you comply

Protective gear you'll need

This is the most important stuff you'll buy for your racing program. It needs to fit well to keep you comfortable and be durable and protective to keep you safe in a crash.

Leathers* – A lot of "entry-level" racing suits from the major manufacturers now offer tremendous protection, so while you should always buy the best you can afford, it's not necessary to spend \$2000 on a suit. Fit is very important to safety, so make sure it's very snug.

Boots* – This is where spending a lot seems to increase protection. Definitely buy the best boots you can afford, because it's money well spent. Popular boots are Dainese Torque or Axial, Alpinestars SuperTech or SMX, and Sidi Vortice.

Gloves* – You'll want a full gauntlet with two wrist closures, kevlar stitching, wrist and knuckle protection, and palm protection. Alpinestars SP-1 or above is a good place to start. High-end gloves are usually made from thinner materials for better feel, they don't necessarily offer better protection.

Helmet* – All Snell 2010 or ECE rated helmets will be safe enough to pass certification. Generally, the more you spend, the lighter and cooler (more air flow, that is) the helmet will be. Scorpion and HJC make great entry level helmets. Shark, Shoei, AGV, and Arai make mid to high-end helmets. Fit is the most important feature of a helmet. Buy what fits best. A race helmet should be tighter in the cheek pads than a helmet used for street. Most helmets have various thicknesses of liners and

cheek pads to customize fit. Regardless, all helmets must have a manufacture date no more than 5 years ago.

Back Protector* – Dainese, Alpinestars, Knox, and Spidi all make these. Make sure they're Level 2 Certified

Chest Protector – These are optional at this point, but a very good idea. Dainese, Alpinestars, and Knox make good ones.

Undershirt and Shorts – Under Armour-like stuff is nice because it helps the leathers slide on and off easily and helps prevent rug-burn inside your suit if you take a tumble.

Ear Plugs – These are absolutely necessary to prevent hearing damage. They also help you relax while riding.

Extra Knee Sliders – Always have an extra set on hand. These are also available from trackside vendors.



Motorcycle: Basic Prep (required)

These are basic modifications/additions you'll need to perform to have a race-legal motorcycle. Since you're likely a provisional novice, your tech requirements may be less stringent. Tape all glass and remove your mirrors, drain and flush your coolant, refilling with a non-glycol coolant or water. CHECK THE RULEBOOK!!!

Motorcycle* – There are a couple ways to go about this. You can either race prep an existing street bike or buy an already prepped race bike from another racer. Usually the latter is a slightly better option because you end up getting more for your money and don't have to worry about crashing a pristine

streetbike. No matter the route you choose, stay away from the big bikes (1000cc bikes) if you can. 600cc inline-fours or 650cc twins are easy to find and a great platform for a new racer. Liter bikes are unforgiving and teach hard lessons.

Bodywork* – At the very least, you need a belly pan to catch any oil or fluids that might blow out of your engine if something goes bang. Most bikes, however will need a full set of body work. Hotbodies, Armour Bodies, and Skarkskins are reputable companies.

Case Covers – Are required except where not available for your make and model of bike.

Coolant Change* – Anti-freeze out, water in. It's not uncommon to have to flush and fill your radiator ten times to get all the glycol out. Water-Wetter is an approved and recommended additive.

Frame Sliders* – Look for these from Woodcraft or Vortex. Avoid the "street" style versions that have bolt heads that can get ground down in a crash.

Shark Fin or Sprocket Protector* – Woodcraft makes a nice one.

Transponder – These are the AMB TranX 260 models that are required for practice sessions and races. Lap times and finishing positions are determined using the transponder both of which are posted after each practice session and race. Rentals may be free the first race weekend for provisional novice; but if you're racing the entire season, suck it up and buy one. All lap times are available to review at mmp.mylaps.com. There are used units available on motorcycle racing forums, and you will have no problem selling it when you are done.

Steering Damper * – Scotts or GPR are very popular units.

Safety Wiring* – This will take some time and broken drill bits. www.probolt-usa.com has beautiful pre-drilled bolt kits that save a ton of time. See "Safety Wire" document

Race Numbers and UtahSBA Decal * – Basic numbers are available at most shops and the USBA decal is provided at registration. If you want to get rad, places like Drippin' Wet Graphics make cool stuff. Bodywork is so small these days, there is a little leeway, but don't push your luck.

Tank Sliders* – These are required if you're on a 2006/07 R6 (good idea for all 2006+ R6s)– Google it.

Fuel – This is dictated more by physics than by the rule book. Pump gas is fine and cheap. Miller has a few varieties of pump gas on-site. Fuel cell foam is not required, but it's a nice addition. It keeps fuel from sloshing in the tank or spraying all over if your gas tank is ruptured in a fall. Foam can be found for under \$20 at www.jegs.com

READ THE RULEBOOK!!!

Motorcycle: Beyond the Basics

These are common modifications that most racers will do. Some have performance gains more quickly recognized than others, so be smart with where you spend you money if you decide to do any of these. Many mods are made to increase adjustability or speed repair in the event of a fall. Don't forget that with most every modification, dyno time is probably required or you may actually be reducing your horsepower.

Aftermarket exhaust – This is a pretty common mod that saves a lot of weight and boosts performance a bit.

High Flow Air cleaner – Another common mod that gives a



little performance boost and is easy to clean.

Power Commander/Bazzaz – This is necessary if you have a fuel injected bike and do exhaust or air filter modifications

Brake Lines – Stock brake lines are fine in the beginning, but steel (or Kevlar) braided lines will provide better feel and power due to less brake line expansion.

Chain and Gearing – This lets you tune your gearing to your riding style and track configuration, as well as save some weight. Go with 520 (that's the size) chain for 600cc bikes, front and rear sprockets. Ask around for what sprocket size is good for your bike on Miller's different track configurations.

Suspension – A suspension evaluation/set-up with the track-side tuner is a very good idea and doesn't cost a lot. Stock suspension on most modern sport bikes is good for most new racers and really good for racers around 150-170lbs. If you're outside that range, new springs and possible valving might be on the list of things to upgrade once you get some speed under your wheels.

Tire Warmers – These are definitely optional, but are nice to have so you can hit the first lap of a race pretty hard. Race compound tires should really have tire warmers, but most "track day/



street" compounds are reasonably warm after a couple laps, and are economical to race on.

Weight Reduction – Look at what things can be removed (and sold!) to save weight. Cooling fans, exhaust servos (if you have aftermarket exhaust), replace standard battery with a lightweight unit, stock ignition, etc. are good candidates.

Swingarm Spools – These act as swingarm sliders in a crash, but also fit nicely in your rear end stand.



Aftermarket Handlebars (and spare handlebar tubes) – Aftermarket handlebars (or clip-ons, as they're called) are cheaper than the stock units and allow just the handlbar tube to be replaced in the event of a crash which is way cheaper and more convenient than a stock unit. Aftermarket clip-ons also allow for more adjustment to the rider's hand/arm position.

Aftermarket Foot Controls (and spare foot pegs, brake/ shift pedals) – Like the handlebars, these are cheaper and easier to replace than the stock units. Always have spare parts on hand.

Fuel – Race fuel is available from trackside vendors. Miller has high-performance fuel in pumps on premise. (\$\$\$)

Brake Levers – Stubby brake levers aren't just for good looks, they're also for added safety to help avoid a turn-1 fall if another rider contacts your front brake lever.

Pit stuff (for your motorcycle)

The trick to having an efficient pit is to bring just what you need, and nothing more. It's nice to have a dedicated track tool box so you're not scrambling around packing up tools Friday night before the races. It also makes it faster to pack up and head home on Sunday night.

Front and Rear motorcycle stands – Whether you make them or buy them, make sure you have some

Fire Extinguisher* - Required to be in or near your pit.

Paper Towels and Rags - Keep your bike and gear clean.

Duct Tape – This is for taping stuff. Millions of uses.

Zip Ties – In racing, there are many things that need to be zipped or tied– these perform both functions.

Safety Wire* – Used for safety wiring (see "Safety Wiring" in the back of the rulebook).

Spare Nuts and Bolts – Bodywork bolts (dZus if you have them) and other misc. nuts and bolts (M6 and M8 are popular)

Tools – Socket set, screwdrivers, allen wrench set (ballend), something big for the axle nuts (can be a socket), pliers (needle-nose and whatever normal ones are called), deadblow hammer, open-end/box wrench set, bastard file, big channel locks (just in case)

Chain Lube – Any of the spray-on kind at motorcycle shops, or White Lightning if you are diligent about cleaning and lubing (which you should be).

Windex (or plastic specific cleaner) – For windscreen and/or helmet visor, etc.

Pressure gauge – The tire guys usually set this for you, but it's good to have your own. Make sure it's high-quality and accurate. Just a pound or two of pressure can make a big difference.

Tire pump – The kind you use to pump up your mountain bike tires. Don't use the built in gauge to set your pressures, though!

Funnels

Gas Can

Electricity – For tire warmers. There is a \$10 fee for electricity in the paddock– find someone to split this with. Electricity is no extra charge if you get a garage.

Extension Cord – For warmers if you got 'em.

Extra Engine Oil - Just in case. Bring at least 1 quart.

Work Gloves – Make sure to have "Mechanics" style and disposable Nitrile gloves on hand.

Sharpie Markers, Pencil, Paper – These are for writing stuff down.

Notes and track maps – Track maps and organized notes for setup are a critical tool to learn how to roadrace. Learn from your successes and your mistakes.

Some Kind of Transport – Keep it simple. You don't want to waste your racing budget on driving to the track. Pickups, small trailers, or your buddy's or fellow racer's vehicle are all pretty cheap ways to get your bike to the track.

Pit Stuff (for you and your crew)

Garage – Split one of these with three other people and it'll be the best \$35 you spent all weekend.

Shelter – If you can't swing a garage, get some sort of EZ-Up or similar shade tent.

Chairs – Or at least something to sit on that's not the ground or your trailer.

Towels – Bring two; one to wipe the sweat off and another to get wet to keep yourself cool.

Spray bottle filled with water – Yet another indispensable luxury for those summer races.

Food – This can be whatever you want, just make sure you eat enough.

One gallon water jug – This is just for you and you need to make sure you drink all of it during the day. Electrolytes replacements are also a great idea (Gatorade, Cytomax, or Hammer Nutrition's "Heed"). Or eat bananas and potato chips for potassium and sodium.

Close-toed shoes and sleeved shirt – This goes for you and any racing fans you bring with that may want to watch from pit wall (or ride karts).

Sunglasses, hat, and sunscreen – There's no shade at Miller, so be prepared. Don't underestimate the sun you'll get during a weekend at the races. Put that sunscreen on early and stay in the shade. Give time for the sunscreen to absorb into your skin ... sunscreen in your eyes at 150 mph isn't fun.

Somewhere to sleep – Whether you're in a sleeping bag or RV, MMP has electricity, bathrooms, and showers to keep everyone happy. There are plenty of motel rooms near the track, too.

Pit transportation – Miller is a huge facility. Having a scooter, bicycle or even a skateboard makes trips to the gas pump that much easier. It's also nice to go to different areas of the track and see how the fast guys are getting though a particular corner. If you have friends and family come out, Miller has golf carts available for rental.

Paperwork

AMA Membership* – You must be an AMA member to race with the UtahSBA (this is for insurance reasons).

Copy of Race Registration – Print this off WHEN you register online.

Race License* – Always have this with you at registration. If you're new and don't have a license yet, bring a receipt from your NRC.

Emergency Contact Info*– Print a copy of your health insurance and contact information and leave it in the pocket of your leathers.

Health Insurance Info – Read the fine print on your health insurance policy, and make sure it covers racing. You get very limited coverage with your AMA competition membership. It's no time to find out about coverage if you're laid up in the hospital. If you can't afford insurance, you should probably choose a different sport.

Race Day Schedule – You will get this at registration. Post it up somewhere visible in your pit area, because you'll need to look at it often.

Track Map – You will also get this at registration. Keep it handy to study and make notes.

Notebook – It's important to write everything down, whether it be tips from an experienced rider or your feedback from your last session on track.

What it's like: Your first Race Weekend

Your first race weekend is your initial step toward racing glory- or at least the first step toward some of the most fun and excitement you'll ever have on the right side of the law. There's a lot to do and it might seem hectic, but in reality it's not too bad. It's critical to be prepared, organized, reduce your stresses and focus on your riding. Here's what to expect and some tips that will make things very smooth.

Preparation (the weeks or months before your event)

Basically, make sure you've got "What you'll need" and "What you gotta do" covered. Plan to have everything completed at least two weeks before your first event weekend. That way you've got two weeks to be behind schedule and still be ready for your first event. What I'm saying is: DO NOT procrastinate at all– things hap-



pen and you want to have a time buffer. Working on your bike at the track is no fun at all, and increases your anxiety 10-fold. Prep your bike before you get to the track whenever possible.

Aside from the technical preparations, it helps if you've visualized your pit set up throughout the week before and make sure you have easy access to all the things you will need during the race weekend. You'll also want to make sure you show up rested, fed, and psyched. Your first race weekend is an important moment in your racing life, so don't blow it by being less than 100% if you can help it.

Make sure you've talked to your mentor and figured out what's what regarding logistics and whatnot. If you're taking the NRC with the UtahSBA the same weekend of your first race, your mentor is likely one of the instructors (which makes that part easy)

When you get to the track (7am sharp!)

- Pre-register! If you don't pre-register, you'll be gridded in the back. Starting from the last row makes for a long race.
- Go to registration and check in (you've already registered online, remember?) Bring your ID, AMA membership card, and your race license (if you have it already)
- Make sure you AND your crew sign the waivers and receive wristbands.
- Make sure you leave registration with a copy of your registration, track map, daily schedule, tech form and a practice sticker.
- Find where your Mentor is pitted and go set up next to them.



- Grab your tech form, bike, and leathers and take it to Tech Inspection (it will be in one of the garages, ask if you can't find it). It's great to have a friend to help carry your gear. Important: if you're using tire warmers, get your bike through tech before you set up your pit, that way you can warm your tires for as long as possible.
- ◆ The technical inspection guys are your friends. They have a skilled eye at identifying problems you may have missed. Even the best mechanics need someone to double-check their work at 150 mph. A clean, well-prepped bike is a safe bike. If your bike is spotless it's easier to identify fluid leaks or other problems. If you have any questions, just ask the people in Tech.
- Go talk to your tire guy and get the pressures du jour (that's pressures of the day).

- Double check your bike (fuel, safety wire, oil, steering damper, warmers, etc.) and your gear (make sure it's all there and easily accessible)
- Get your undershirt/shorts and leathers on, because it'll be about time to attend the riders' meeting (in the same place as Tech) and your first session will
- MILLER MOTORSPORTS PARK
- start immediately after (check the schedule).
- Go to the riders' meeting. This is ABSOLUTELY MANDA-TORY and will discuss any specific issues for the day. Pay attention and ask questions if something is not clear. Be sure to introduce yourself to other riders.
- If you've got tire warmers, you flipped them on before the Rider's Meeting, right?
- Start your bike to get it warmed up. You can turn it off once it reaches operating temp.
- Have a chat with your mentor about what you should work on and how to approach your first sessions.
- Do a triple check of your bike and gear.
- Listen for first call for the session

First Practice sessions on track – These are your first ontrack session as a racer. Congratulations.

- Listen for First Call on the loud speakers. There's also an online reminder you can get on your mobile phone at www. utahsba.com/calls. Once it's given, you want to make sure you have your leathers, boots, and back protector and chest protector, if you have it, on and fully zipped up and ready to go.
- Listen for Second Call. Once it's given, put your ear plugs in, helmet on, and gloves on. Start your bike to make sure it's up to temp. Quadruple check to make sure your gear is all zipped and fastened properly (leathers, boots, helmet!) You've got stickers on your bike that show your practice group and that you passed Tech, right?
- Listen for Third Call. Once it's given, pull the bike off the stands and proceed to the grid area where you'll be let out on track by the marshal.
- ◆ Take it easy during your first session (take it really easy for your first couple laps). Ride your own pace and do not try to match any other rider's. The track will be cold and dirty, the tires and brakes will be cold, and you're brain probably won't be up to speed. Just get yourself and your equipment warmed up. Look around at reference points, chill out, concentrate, and have fun. You're a racer, but you want to at least keep it upright until your first race.
- Remember, it's the passing rider's responsibility to get by you cleanly. Don't worry about the person behind you ... ride smoothly and predictably, stay on the race line and think. If you're not at race pace, don't run right to the edge of the curbing ... there may be someone trying to sqeeze by between you and the curbing.
- It's OK to do practice starts on the left side of the hot-pit. You'll see a coned-off area right when you exit the track. DO NOT practice starts in the paddock or anywhere else on the course ... this will get you kicked out for the weekend, as will speeding in the pit.
- When you come in from a session, get the bike on the stands



right away (and warmers on if you got 'em) and get the next session's fuel in. Nothing is more embarrassing than getting a ride back on the sag-wagon after running out of gas on the track.

- Get your helmet and gloves off and make yourself comfortable. Have a drink, cool off, eat a little, etc. Keep your helmet out of the sun so it stays cool.
- Perform any adjustments or repairs to the bike or your gear (like cleaning bug splats off the windscreen).
- Revisit your plan from the previous session and go over your plan for the next session. Visualize the track and get your concentration back.
- This is pretty much how it goes as you alternate sessions with other groups throughout the day.

Race Schedule and Grid Positions

- Your starting grid position will be posted on the wall of the Tech Inspection garage before the day's racing begins, so make sure to find out (and remember) what position you will be starting your race from. You remembered to pre-register, right? If not, back of the grid for you. Many racers put a piece of tape on their gas tank that shows where they grid. It's one less thing to think about on that warm-up lap.
- Make sure you look at and keep track of the daily schedule so you know when you'll be racing.
- Enjoy watching the racing throughout the day. This is a good time to watch the starting procedure for other races, so you know what to expect.
- Get back to your pit at least 40 minutes before your race to get ready to go. Avoid the needless stress of rushing.
- Get your bike and gear prepared for your race. This means fuel, tires, a clean helmet visor and windscreen!
- Talk to your mentor and go over your plan for the race. Visualize the start, first lap, and race laps.
- ◆ Double check your bike and gear. You don't want to have to think about it again. Look again for fluid leaks, loose foot pegs and levers, chain tension and excessive tire wear.
- ♦ Anticipate first call so you're not rushed getting your gear on.
- Relax, focus and keep a cool head.

Time to Race

- When First Call is announced, get your leathers and boots on and make sure the rest of your stuff is quickly accessible. You don't need to fully zip up your leathers at this point. It's a good idea to start your bike to get the engine up to temp.
- When Second Call is announced, get your back protector, chest protector on and zip up your leathers. Take a drink of water and get your ear plugs in, helmet and gloves on. Stay calm, listen to your mentor.
- When third call is announced, it's go time. Give some highfives to your crew, pull the bike off the stands and ride over to pre-grid at the track entrance (this is same place you pregridded for the practice sessions). Now is the time to REALLY concentrate on your plan.
- You will then be released by the track marshal to enter the track and proceed on your Warm Up Lap. Take this at whatever speed you want. However, don't cruise, because everyone will be waiting for you on the starting grid.
- At the end of your warm up lap, get your hand in the air to signal to the riders behind you that you're slowing down. Then proceed carefully to your starting position. There will be track workers to help you find your grid position (this is where the tape on your gas tank with grid position helps, especially if other riders screw up and are in the wrong position.)
- Once you're in your starting position you need to watch the track worker standing in front of the racers holding the red flag. Once he/she lowers the red flag and walks off track, you need click into first gear and watch the Starter (the guy up in the tower). The Starter will initiate the starting sequence at any time.
- As soon as the Starter initiates the starting sequence, get your revs up and wait for the lights.
- The red light will go on, and when it goes out, it's time to go.
 You're now racing. Congratulations again.
- If you stall on your start: don't move or try to restart your bike, just get your hands up in the air.
- Be familiar with the flag starting proceedure in the rulebook, just in case there are technical difficulties with the lights.
- Look ahead and hold your line through Turn 1. It's a scary and intense place. You can't win a race in the first turn but you can definitely lose it, so be extremely cautious. Remember, if you're a provisional novice people are watching. If you

crash those first two weekends, you may be back in class.

- Once you're through the first few turns, try to settle into your rhythm and start executing your plan; (which should be to keep your bike and your fellow racers' bikes out of the dirt and upright)
- Pay attention to your own movements and race lines, as well as those of others around you.
 This knowledge and understanding is valuable to your progression.
- Pay attention to the Track Marshals and any flags they may be waving. If you see a yellow or red flag, NEVER chop the throttle unless you're trying to avoid another rider.
- When you cross the finish line at the checkered flag, don't abruptly slow down; keep on pace until you get to Turn 1. Racers behind you may be in a battle to the line and not realize you're moving slowly. Don't forget your braking marker in turn 1 ... this is where you realize how tired you are.
- You just finished your first race. Serious congratulations to you. Now proceed on your cool down lap and exit the track to your pit. Make sure to wave to the corner workers and spectators— you just put on a good show. Pay attention to how you feel. Racing is hard work, so if you're excessively fatigued you may just be realizing it as your adrenaline slows. No wheelies, burnouts and never EVER stop on the track.
- Back at your pit, pull off your helmet and get something to drink. High-fives to your crew again.
- Talk to the other racers you battled with. Now's the time to share war stories and make friends.
- Chill out and take in the experience.
- Talk to your mentor about how things went.
- If you're racing again, make your bike and gear preparations. If not, get out of your gear and go help work the grids or cheer for your fellow racers.

Now print this document out and save it with your track notes!



Signal Flags

Green Flag and/or Green Light: start of race or clear track conditions.

Checkered Flag: Indicates end of race or practice session. Proceed around course to the designated track exit.

Red Flag: Indicates race has been stopped. A red flag displayed during a race or practice indicates extreme danger. Reduce speed and proceed safely to the pit road.

Black Flag with Orange Center

(meatball flag): Indicates a "Stop and Go" penalty or other penalty. Report to the Pre-Grid Marshal within three laps. A number board will be displayed with the flag indicating the rider being signaled.

Black Flag: Indicates a problem and immediate removal of your motorcycle from the racing line. Carefully reduce speed, get off of the racing line and stop at the first safe location off the course.

Yellow Flag with Red Stripes: (Debris flag) Indicates oil, gas, dirt or other debris are on the track surface. Proceed with caution.

Yellow Flag: (Caution flag) Indicates motorcycles, riders, and/or Marshals are in the area but out of racing lines or likely run off areas. Proceed with caution!

White Flag with Red Cross: (Ambulance flag) indicates that ambulances, safety vehicles or emergency personnel are on the course. Exercise caution. A waving "Ambulance" flag indicates an ambulance and/or some other safety vehicles are working directly downstream. Exercise extreme caution!

White Flag: Indicates final lap of race.

White and Green Flags Crossed: Half the total race distance completed.

Any waving warning flag indicates a hazardous condition on the racetrack and possibly in the racing line. Proceed with caution. Passing is not allowed under any waving flag from the point of the flag until past the incident area. Read your rulebook for more information.



UtahSBA New Racer Certification Course Curriculum

USBA Racer Certification Requirements

- Be on time to class and to the on-track sessions
 - o Instructors have a low tolerance for tardiness. So do your classmates.
- Written test
 - o 90% required
 - Use of open notes and rulebook is allowed
- Track Portion
 - Mock Start
 - Get grid position from NRC Director
 - Race to turn 3 then back off to complete as a cool down lap
 - Return to grid position (do not exit the track)
 - Mock Race
 - 3 laps
 - If you crash at any time during the certification process you will fail and be required to retake the class!

Why are you here?

- Riding a motorcycle fast is exhilarating
- Riding a motorcycle on a closed course is the safest place to ride a motorcycle
- Track day riding vs. racing
- Racing a motorcycle takes the exhilaration to the next level
- · Racing a motorcycle is dangerous
- Most of you are here to take your riding skills and thrill to the next level
- Most of you will earn more money on Monday than you will on a race day
- · Your mental approach is the most important element for your safety and the safety of others

New Rider Certification is all about safety

- Everyone on the track is responsible for safety and has a direct impact on other riders
- Crashing is a possibility
- · Being taken out by someone is a possibility
- Taking someone out is a possibility
- Crashing is expensive and time consuming
- Have personal health and disability insurance coverage
 - o Trauma care costs
 - o Helicopter
 - Recovery
 - Loss of work

Common sense and accident prevention

- We are not born with common sense, we acquire it throughout life.
 - You can experience it yourself or learn from others
 - Observe how others have taken risks and have been injured

- o Observe how others have succeeded
- Unsafe acts
 - o Being In A Hurry Use your checklists
 - o Taking Chances Daring behavior, disregard for safe practices, "It's not going to happen to me."
 - o Being Preoccupied Daydreaming, thinking about personal problems, not paying attention
 - Having A Negative Attitude Being angry or bad mood. Stay cool and in charge of your emotions
 - Failing To Look For Hidden Hazards Track and motorcycle conditions are constantly changing.
 Be alert
 - Poor Diet Nutrition and hydration
 - It's Not Your Day Respect this occurrence and ride around it. Don't push yourself over your limits for that day. It is better to be one position back than DNF

Preparation: READ THE RULEBOOK !!!

- Read the rulebook every year so you are aware of changes and how they affect you and your motorcycle
- The rulebook information in this presentation is not complete and is being provided for general awareness. The rulebook prevails.

Sections 2 and 3 - Class Definitions and Entries (selected topics)

- Novice Classes: GTU and GTO
- Amateur Classes: GTU and GTO (Novices require approval from NRC Director)
- Mixed Expert and Novice Classes (Novices require approval from NRC Director)
 - Sportsman (Defined by lap times per 2.4.4.6)
 - o Formula 5 (All bikes at least 5 years old per 2.4.4.7)
 - o Formula 40 GTO
 - Twins GTU, GTO, Supertwins
 - o 250cc
 - o Women's
 - Endurance GTO, GTU
- Expert Only Classes:
 - o Superstock MW, HW, OPEN
 - SuperBike MW, OPEN
 - o KoM GTO, GTU
- Motorcycle eligibility READ THE RULEBOOK !!!
 - o Superstock, Superbike and GT

Section 4 - Licensing, Qualifications and Advancement (selected topics)

- Provisional Novice (4.1.3.1)
 - Must race within 12 months of NRC completion date
 - Complete at least two rounds and don't crash to be eligible for Novice status
- Novice
 - Support volunteer program or lose all points and/or be prevented from entering final races
- Expert
 - Automatic advancement for top 5 novices (4.3)
 - Petition New Racer Director after completing 6 races and volunteer requirements. Petition in writing (email) and allow two weeks for evaluation.

Section 5 - Technical and Safety Requirements

- Safety Equipment MMP is a fast track. Get good gear
 - Leathers One-piece or two-piece zipped together
 - Textile okay for track days. Some are approved for racing although leather is recommended.
 - Good repair. No tears, grind-through or rips.
 - No tape repairs or attachments
 - Spine protector Must be worn at all times on the track
 - o Helmet No older than 5 years prior to the start of the season. DOT and

- Snell compliance or FIM certification (6.4.1) Gloves Don't skimp here. Make sure they are well stitched and will stay on. Boots - Motorcycle boots recommended with good heel and ankle protection.
- Motorcycle Preparation Section 5.3 Highlights
 - Neat and clean
 - Safetv wire
 - o Fluids retention Oil lines and fittings, brake lines and fittings, coolant
 - No glycol-based coolants
 - o Catch Pan
 - o Brakes pads, retaining pins, lever bolts
 - Tires The \$25 you try to save by eeking the last bits in tire-life can cost big from an expensive crash (How do we know?)

Let's Go Racing - Technical Inspection (Section 6)

- Motorcycle; Lowers removed, and with access to coolant
- · Rider: Bring all safety gear
- Bring inspection form obtained from registration (will require AMA card and race license)
- The rider bears the responsibility of presenting a motorcycle in conformance with all requirements! The burden of complying with the rules regarding class suitability and technical requirements rests with the entrant.

Let's Go Racing!!! - Practice

- Preparation is critical. See Race Prep Checklist
- Track entrance and exits
 - o If you don't know ask the Track Marshal, Race Director or a racing official
 - Many entrances have special procedures for specific track conditions
 - Be aware of tire temperature
 - Hand up if starting slowly
 - It's your responsibility to enter safely
 - Give other riders advance notice of your intentions to exit
 - Hand up or leg out then get out of the race line and slow
 - Don't chop the throttle
- Practice sessions are for practice! You can't win practice
- Use the first session to rediscover the track, assess your equipment and get your head in the game
- Document your outing
 - Lap times
 - o Tire pressure changes
 - Tire conditions
 - Reference points
 - Brake markers
 - Attitude

Let's Go Racing!!! - Race Day (See Procedure details in Section 7)

- Review checklist
- Practice Same as above. Use the time in the first session to gradually get up to race pace
- Grid position. Post it on your motorcycle with tape.
- Start calls or warnings to be at pre-grid
 - o 1st call -10 minutes
 - o 2nd call-5 minutes
 - o 3rd call 2 minutes
- Pre-grid
- Hot lap or sighting lap or warm-up lap.
 - Don't weave
 - o You can't win the sighting lap!
- Stage at grid position Get set quickly
- Start sequence

- 2 minute board First gear. Start revving engine to launch RPM.
- 1 minute board
- 1 minute board sideways (or red light on)
- Red light on ready to launch
- RED LIGHT OFF = GO!!! (Hand up immediately if you stall!!!)
- (If using flags and not lights) GREEN FLAG!!! (Hand up immediately if you stall!!!)
 - Courtesy Flags
 - o Cross Flags White Flag
- Checkered Flag
- Cool down lap No show-off tricks, burn outs or stunts

Operational Flags - 8.1

- Green
- Checkered
- Red
- Black with Orange Circle (Meatball)
- Black
- Blue

Warning Flags - 8.2

- Stationary Passing allowed. Exercise caution
- Waving No passing until after the incident
- Yellow
- Yellow with red stripes
- White with red cross

Section 9 - Racer and Crew conduct: General, on the track and in the pits

- General
 - No intoxicant or drug use by the racer or crew. It is highly recommended that pit visitor do not bring them into the racers pit area. A permanent resident of the pit could be considered a crew member.
 - o The Racer and Crew must comply with MMP Rules and Regulations
 - Be nice and play nice. No fighting.
 - o Any punitive actions will be levied on the racer.
- On-track Conduct
 - Passing is the biggest area of contention
 - "The responsibility for the decision to pass rests on the overtaking rider, as does the obligation to do so safely." MMP Rulebook
 - What is a safe pass?
 - 6 foot cushion (at track days)
 - No drama
 - No need for apologies
 - Where do I pass?
 - · Straights and around the outside
 - Inside on the brakes
 - Frustrated? Pull in the pits and wait for a clear track
 - Hold your line and turn predictably. The faster riders will find a way to pass.
 - No blocking
 - Slow riders use proper hand/leg signals
 - Racing Incidents
 - Excitement keep your head!
 - High-sides
 - Low-sides
 - Collisions
 - Debris and fluids
 - Failures Get off the race line and get your hand up

- Falling
 - · Accept that you can fall
 - Iniuries can occur
 - The motorcycle will be damaged
 - That is the end of your race (except endurance races but must be tech inspected.)
 - · Let go of the bike
 - Relax
 - Spread out when sliding. Tuck when tumbling.
 - Stop before standing. Count to 3 after you think you have stopped then look at the sky or ground to make sure it's not moving.
 - If you are on the track don't stand up or move immediately. Assess where you are first and where the other riders are. It's better to be run over than hit standing up. Also the other riders have already made a decision of how to get around you.

Issues with another rider or with track or USBA officials See Section 10

READ THE RULEBOOK II!

• If you make an inquiry to a USBA official that is clearly defined you will most likely get an "RTFRB" as a response.

General strategies to improve your racing results

- Document your baseline settings for evaluating performance effects
- Suspension tuning
- Schools
- Tires and track-side tire vendors
- Checklists
- Track diagrams
- Read books
- Talk to others Use what makes sense to you; disregard others

Notes:

Race day procedures

1. Preparation

a. Working on your bike at the track is bad; make sure it is ready to go before you load it in the trailer or truck.

2. Entry

- a. Pre entry saves you money and with most organizations you must do it to keep your points and not have to start at the back of the grid.
- b. Proper classes

3. Practice day

- a. Arrive early
- b. Verify credentials
- c. Set up pit
 - i. Canopy Secured and ready for wind
 - ii. Riding gear ready for wear
 - iii. Bike prepped and gassed
 - iv. Check tire pressures
 - v. Help your neighbor
- d. Technical inspection
 - i. Remove lowers
 - ii. Take all riding gear
 - iii. License and AMA card
- e. Attend riders meeting
 - i. Pay attention
 - ii. Don't interrupt; they are short when there is not a lot of talking
 - iii. Verify flagging, starting and Entry/Exit procedures
 - iv. If you're new, introduce yourself
- f. Dress and prepare for riding
 - i. Clear mind and check track diagram, what will you work on?
- g. Listen to announcements
 - i. 1st call usually around 5-10 minutes (1/2 sprint race distance)
 - ii. 2nd call- usually 2 or less minutes (be ready in pit with all gear)
 - iii. 3rd call- pull the warmers and proceed immediately to pre grid.
- h. Pre-grid
 - i. Line up in speed order for practices, grid order for racing
 - 1. Slower riders to the back
 - 2. Hot tires up front
- Practice
 - i. Purposeful
 - ii. Make changes and take notes
 - iii. One change at a time
 - iv. Enjoy your time
- End of day
 - i. Help your neighbor
 - ii. Clean your area
 - iii. Depart quickly (the track employees would like to have a life)

4. Race Day

- a. Arrive early
- b. Set up pit
- c. Verify credentialsd. Technical inspection
- e. Mark race day schedule and decide which races you can watch

- f. Riders meeting
 - i. Amateur riders attend in full gear, as 1st practice is usually right after riders meeting.
- g. Listen for announcements
- h. Practices do one practice start from the hot pit (be courteous)
- i. Check final grids and write them down
- j. Recon the grid and make sure you know where the row number and place is. This will avoid embarrassment and starting at the back of the grid.
- k. Listen for announcements
- Race
 - i. Report to pre-grid between 2nd and 3rd call. (Heat and water)
 - 1. Line up in starting order for the Marshal
 - ii. Warm up lap
 - 1. Proceed onto the track at the discretion of the Marshall
 - 2. Accelerate hard and brake hard on the warm up lap to heat tires. (Use caution, sidewalls will still be cool, this is a fine line, give it at least 3 to 4 corners before full lean!)
 - 3. Proceed to start position (signal with hand 2 turns before slowing to grid
 - 4. Enter grid position, snick into neutral.
 - iii. Start
 - 1. 2 Min board shift to first gear and make sure you do not stall.
 - 2. Launch when the red light goes out or on green flag
 - iv. Finish
 - 1. Race to the checker!
 - 2. Do not slow abruptly, show a hand
 - 3. Wave and thank the corner workers (this is a must do!)
 - 4. Proceed to the exit and signal properly
 - 5. Pit
 - 6. Complete post race inspection and pre race prep.

5. Conduct and pit decorum

- a. You are responsible for your guests.
- b. No alcohol in pits during racing.
- c. Make all the guests feel welcome. Racer smugness is common and hurts our sport immensely!
- d. Animals are allowed, but it really isn't a great place to have them. Pavement is very hot and any incidents will be handled quickly including removal of the offending animal.
- e. Help your neighbor.
- f. Children need to be closely supervised and there are plenty of hazards to hurt them.
- g. Space is-important. Do not crowd in without checking with the person first, check, the egress and direction the bikes leave and enter the pit. Nothing annoys a racer like an obnoxious pit neighbor.
- h. Speed in the pits is 10MPH
- i. If you play music, check with your neighbor
- j. Don't set up your generator to blast your neighbor with noise.
- k. In the event of a crash:
 - i. The crash truck will pick up your bike
 - ii. Do not mess with the ambulance folks
 - iii. Make sure your pit has your number displayed for drop off
 - iv. If you are a friend, pack up your buddy like you would ask.

Track Notes Utah Sport Bike Association Weather: Sun Overcast Rain Time: Temp: Track: MMP-East MMP-West MMP-Full MMP-Outer Other: Session number: Checklist ☐ Brake pad wear ☐ Tire pressure ☐ Tire wear ☐ Brake/clutch lever ☐ Throttle return ☐ Handlebar motion Oil level ☐ Fuel ☐ Brake fluid Coolant ☐ Safety wire Mileage **Tires** Front tire: Cold pressure: Wear: New Good Tire warmer: Low Med High Warm pressure: Warmer time: Notes: Rear tire: Cold pressure: Wear: New Good Fair Warmer time: Tire warmer: Low Med High Warm pressure: Notes: Suspension/set-up Front preload: Front compression: Front rebound: Front sag: Rear compression: Rear rebound: Rear preload: Rear sag: Steering dampener: Sprocket-front: Sprocket-rear: Notes: **Sessions summary** Number of laps completed: Fastest lap: Slowest lap: Average: Front hot tire pressure: Rear hot tire pressure: Wear: New Good Fair Notes/changes: East One 9 Precision 10 Fast 22 Wind Up 8 Indecision Club House Corner Dreamboat . 15 ^{Agor}

Black Rock

20

Tooele 19 Turn

Knoc Out

19 Toole 116 First Admids 13 Maybe 9 111 Make 12 14 Controlled In Indianate 15 Diseases Fight head 3 Work-out 6 Work-out 10 Diseases 11 Diseases 12 Test 11 Test 10 Precion 9	Notes				
23 Release	Tooele Kink 20 14 Satisfaction Gotcha 12 Clubhouse 21 Vind Up	16 First Attitude USPO Ecstasy Faster 11	Demon Demon Demon Diablo	Right Hook 6 Knockout Dreamboat 2	3 Work-out

Handling problems and possible solutions

Suspension parameter → Handling problem	Front preload	Front rebound	Front compression	Rear preload	Rear rebound	Rear compression	Ride height/ geometry	Notes
Long fast corners: Bike runs wide (understeered). Bike sits up.	Decrease	Increase	Decrease	Increase	Decrease	Increase	Lower front / raise rear	Front end rides high through the corner (multiple possible causes).
Long fast corners: Bike runs narrow (oversteered). Bike falls down	Increase	Decrease	Increase	Decrease	Increase	Decrease	Raise front / tower rear	Front end rides low through the corner (multiple possible causes).
Short slow corners: Bike falls down to the inside (oversteered).	Decrease	Increase	Decrease	Increase	Decrease	Increase	Lower front / raise rear	Front end rides high through the corner (multiple possible causes).
Short slow corners: Bike sits up while turning (undersleered).	Increase	Decrease	Increase	Decrease	Increase	Decrease	Raise front / towei rear	Front end rides low through the comer (multiple possible causes).
Front dives too fast when braking hard, doesnt bottom out.			Increase					Bike usually also oversteers in fast corners, steers into corners too easily (falls in).
Front shoots up too test after braking, turning into comers is difficult.		Increase						Bike usually also understeers in fast corners.
Rear squats fast under acceleration.				2 Slightly increase		1 Increase		Bike usually understeers when accelerating out of long corners.
Rear wheel loses road contact (traction) under hard braking.	3 Increase		2 Increase	4 Decrease	1 Increase			Bike feels like the rear pivots around the fron wheel, also a lot of dive during braking.
Tank slapping / front end shake at high speeds and fast acceleration (wobble).		2 Decrease			3 increase	1 Increase	4 Lower front / rase rear	Loss of front tire traction. A steering damper can reduce the unstable feel.
Wallowing /weave in mid comer (long, fast corners).		2 Increase	4 Increase		1 Increase	3 Increase		A steering damper can reduce the unstable feel
Overs series of bumps or ripples the bike packs down, there is no mere travel fo absorb bumps.		If the front packs down; decrease (oversteered in fast corners)			If the rear packs down; decrease (understeered in fast corners)			There is too much damping for the suspension to return fast enough to a norma ride height. Ride is harsh.
Bike feels too harsh over bumps, suspension feels "locked up" over bumps, the bumps are felt directly through the frame.			If the front is harsh, decrease			If Ihe rear is harsh; decrease		Harshness is felt when the bike kicks up or skips over bumps. Locked up and harsh fee can also be caused by pockhs down.

The numbers resemble the likeliness of the solution (1 is most likely).

Be sure to begin by setting static sag, then move on to other adjustments.

Make sure the bike is in a good state of maintenance as many handling problems are caused by bad maintenance.

Ride height/geometry is adjusted with: Ride height adjuster on shock, link plate dimensions and fork distance from the top of the tubes to the font clamp; not the spring preload.

Note this only indicates lhe most common problems with lhe most likely solutions. Many handling problems are complicated.

Much of this Handling problems and possible solutions sheet is reprinted with permission by the good people at www.hyperpro.com

Notes	 	