

37³/₄ mile ISLE OF MAN MOUNTAIN COURSE TRACK README & DRIVING GUIDE FOR GPL

Version 1.1

© Jim Pearson - 2005 -2019
TT Course Notes from 1985 - 1992 © Ken Murray

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Ramsey from Guthrie Memorial

Jim Pearson
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Please refer to APPENDIX A on Page 48.

DEDICATION AND ACKNOWLEDGEMENTS

My full length track for GPL and this companion Driving Guide are dedicated to the many riders who have used their skill and courage to challenge this Island's amazing road racing circuits; the St Johns Course originally from 1907, then this great Mountain Course from 1911, well over 100 years now.

It is pertinent to also recount that the very first races over the Mountain Course were actually the Gordon Bennett Trials for cars, not bikes, from 1904 for a few years, though only bike racing prospered on the road racing circuits here.

I hope that more of the car racing / sim racing fraternity will come to realise what an amazing place this is for racing and personal challenge, an idea that amongst others, motivated me to construct this Mountain Course for a car simulation.

In an age when we are cocooned from cradle to grave by well meaning but often intrusive interventions into personal freedoms by health and safety "experts" and through fear of litigation, it is refreshing to see the independent minded and resourceful people of this small island, hold true to the belief that there is merit in continuing a tradition of road racing that has, inherently, an element of danger but a culture of personal responsibility for the degree of risk taken.

Because of this, you will see much of what is truly the best of the human spirit, from riders, officials, spectators and residents, during TT fortnight and Manx GP week.

Long may that continue!

My thanks go to the following people whose external work made it possible for me to create this track for GPL.

- The many dedicated programmers who made the bespoke track making tools for the GPL Community.
- Ken Murray, former TT and Manx GP racer who gave valued feedback on many of my early Alpha builds.
- Nigel Pattinson, who contrived the added functionality that allowed extra long tracks to be constructed.
- Lee Bowden for agreeing to code my objective for a usable Options Manager Utility, which made my environment and other options much more user friendly. Lee also agreed to include versions of his own Track Start and Pace Notes programs in that utility. (More on this in the separate Options Manager Readme).
- Greg (Gliedzeit) and indirectly, Mech, for valuable information on coding sounds into track locations.
- Stefan Roess who kindly agreed to host my track download.

TRACK BUILD AND FEATURES

This track is the product of my own individual work, it's not the result of a team project.

I made this track because I enjoyed the challenge and the process. At times it became tedious and so I would set the work aside for a while. This and the sheer scale of the project in the detailed form I wanted to achieve, has caused the extended build time of 14 years, from 2005 to 2019.

I have sought no outside assistance for the construction of this track. Source material was obtained by taking over 5000 digital photographs while I walked about 26 miles of the course from **Hillberry** to **Ramsey Hairpin** over three days in 2005, supplemented by many more taken across the Mountain section, plus extra images and my own in - car videos, recorded during my four subsequent visit's, up to the last one during TT week in 2018.

Because these images were taken from a variety of angles, in changing light conditions, and against unhelpful backgrounds, the work to make useful textures out of them of trees / bushes / houses / buildings / course objects etc. was difficult and took years of fine tuning to perfect, but you can be the judge of the results.

Extracting the subject matter from background "noise", making transparencies, correcting house and building images for perspective distortion, then adjusting all images for brightness / contrast / highlights / hue and saturation was a major headache. The objective was to achieve harmony between each object and it's neighbours and to achieve an overall look that tried to replicate environments / light conditions found on the island.

When drafting this track layout, my only outside source and general layout guide was the public Ordinance Survey Map of the island, which does not provide anything like enough fine detail to model a track layout precisely. Accordingly, all the fine routing, corner radii, corner curvatures, direction changes, fine elevation changes, bumps, cambers and sight lines were manually derived from my close observations and seemingly endless fine tuning.

Of relevance, it needs to be understood that the real roads and other features that make up the Mountain Course, are in a constant state of change. Sections of asphalt / tarmac are renewed year on year, as other parts become less smooth or patched. ***In this respect in the late 1980's to early 1990's Cronk-Y-Voddy, Quarry Bends, Sulby Straight and the whole section from Ginger Hall to Sky Hill / Milntown was very bumpy. You will find those conditions replicated in this GPL track.***

Houses are built / renovated / demolished and repainted, so this track will look a little different to the present day. An example is the thick foliage that used to exist on the left after the intersection at **Crosby's** shop, has recently been completely removed. The house on the left at the top of **Rhencullen** was undergoing crack repairs when I took images of it, so I left it looking like that, even though it's been repainted for the last 12 years or so!

Just after I started this project the Manx Government changed the character of both **Windy Corner** and **Brandish** by increasing their corner radii significantly, making them very fast sweepers both. I preferred the driving challenges presented by the tighter radii of the previous road layouts so have retained these in this GPL track. The layout is meant to replicate broadly, the track conditions, including bumps, that existed during the 1990's to early 2000's.

The track surrounds are also rarely uniform for any great distance. Some banks are mown, some are left overgrown with hedgerow plants. Some parts of the track have white lines at the edge, others none, or they have faded away. There are curbs with black and white paint and some without. Accordingly, I have tried to reflect this random character in the objects and texturing.

What else could you possibly want to know?..... Some build stats perhaps?

Length = 60,720 metres or 37¾ Miles.

Elevations = 85 metres at start, less than 10 metres at Parliament Square Ramsey, 428 metres at Hailwood Rise.

Track sections > 3,000

Number of polygons > 700,000.

Number of trackside objects > 50,000

Number of unique 3DO objects > 3,500 with over 500 unique buildings and hundreds of different trees, bushes etc.

All made from scratch.

Some other notes.

The AI have been fine tuned at great length and should only have a minimal number of accidents, even in high damage modes like full GP, 7 lap Mode.

There is only one set of working track cameras, the TV1 set. Using panning cameras for much of this complex track with lots of close to track foliage had the potential to cause eye strain in the observer, because I had to position cams so close to the cars speeding by. Due to this I could also not prevent panning cameras potentially causing screen freezes on some user systems, because the complex track structure conflicted with the rapidly changing direction of view.

The TV1 camera set mostly uses fixed camera views from ideal spots around the course to avoid the abovementioned problems. Many of these fixed camera views provide the traditional spectator view at those points. These should be sufficient. I have included a few panning / zooming cameras on the open sections of the Mountain which suit that environment.. As there is no real variation possible for a completely different looking TV2 set, these have been left non functional. If anyone wants to try making a panning / zooming alternate TV set, I have no objection, but please check the whole track for screen lock ups on several systems before you distribute it.

Track Announcer and Crowd Sounds have been included in locations where they might occur. For example, from the High Pit Camera, in the Pit's, at **Quarter Bridge, Braddan, Ballacraine, Ballaugh, Parliament Square, Ramsey Hairpin** and **The Creg**. During TT Week, Manx Radio does broadcast live commentary around the Course during races through on course loud speakers.

All other track features of note are discussed in the following OPTIONS MANAGER section.

OPTIONS MANAGER

A very brief mention here of this functionality, because I have written a separate detailed Options Manager Readme PDF explaining what is involved and how it all works.

The broad set of options included in this track are;

- Three separate Time of Day / Weather lighting options. Sunny, Lower Light, Dark & Stormy.
- Hard Shadows over track for best use with the two clear / sunny weather options.
- Patches of Ground Fog in several low lying areas.
- Patches of Mountain Mist in several high areas.
- Track Location Names showing above the track in each location.
- Corner Speed and Direction Markers before bends.
- Audio Pace Notes playing in advance of upcoming bends, using Lee Bowden's excellent program.
- Variation of Start positions around the track for training, using Lee Bowden's Track Start Manager Program.
- A facility for swapping out various "sets" of Advertising Banners, that you can try your hand at making.

All of which can be used or turned off independently and in any combination.

The track will be set up initially with the Sunny Environment and Hard Shadows options. All other options will be turned off until you choose to use them.

RELEASE VIDEOS

These three videos made at release may assist to further demonstrate the options described above.

- | | |
|---|-----------------------------------|
| https://youtu.be/Ox_oH3KdoNg | Combined five car set TV view lap |
| https://youtu.be/uqkjHIBVvDM | My driven bt24 lap |
| https://youtu.be/V7-KUr-H8Cw | Options Manager demonstration |

LOAD TIMES AND FRAME RATES

There are a lot of textures and 3d objects to load in this track, so please be patient.

On my moderately fast three year old PC the *initial* load time is about 40 seconds, but less than 20 seconds for the second and subsequent loading of the track while the PC is turned on. Slow PC's may take a few minutes!

For those with similar or better PC specs, frame rates should remain constantly at the maximum, regardless of whether you use the 60 FPS patch or not. The exception can be at the start behind a full field of cars, because other cars in close proximity and the object intensive Start / Finish area are taxing for marginal CPU's.

This should not pose a problem as the other cars (real opponents or AI) will quickly spread out to the point where a good proportion of the field disappears beyond the track draw distances front or rear. This substantially lessens the load on your CPU. This issue is improved in training mode or with less than a full field of cars. Bear in mind that races here IRL are time trials, so training mode is to a degree, "realistic"!

Some simple ways to improve frame rates. Try these suggestions first.

- Use the smaller Textures included in the ALTERNATE TEXTURES download Zip.* See below.
- Reduce the number of opponent cars.
- Reduce Detail Bias Slider in "GPL Options" in game.
- Reduce Sounds in game.
- Turn off Pace Notes in the OPTIONS MANAGER (see separate heading in this document - these can use up to 25% of your CPU depending on your system).
- Turn off FOG / MIST Options in the OPTIONS MANAGER which will reduce texture rendering loads.

Problems with Menus and Replay issues may be solved by cahnging this line in your

C/SIERRA/gpl/core.inito

[Replay]

replayMemoryOverride = **128000** ; If you have less then 256Mbytes RAM remove this line!

More information in this Forum Thread;

<http://srmz.net/index.php?showtopic=12930&st=0>

* There are a few large textures in this track that may cause load issues with some lower spec PC's. Accordingly, I have included a separate zip folder ALTERNATE TEXTURES with large and small sets of these textures. Instructions for use are included. These are included by default in the LITE version of the track.

One is a duplicate set of the original large textures and one is a set of half sized textures. You can try the smaller textures by copying the loose files directly into your main track folder (AAIOM). You can change back to the original large textures by copying / overwriting the smaller textures in the AAIOM Track Folder, with the larger texture set. The default track already has the larger textures included in the Dat, in case that wasn't clear from the above.

DRIVING GUIDE

Introduction

This driving guide is intended to be a companion to the full 37¾ mile Isle of Man Mountain Course I have built for Grand Prix Legends. Several guides to the real course have been written over the years by such notables as Sir John Surtees, Steve Hislop MBE, Mac McDairmid and Tom Herron. I commend those to you as further or alternate reading [if you can find them] to obtain greater insight into a rider's view. One of Steve's guides is available at the official [TT website](#).

This guide is an attempt to assist the simulation car driver/racer who is new to, or unfamiliar with the full Isle of Man Mountain Course. My objective was to provide an easily accessible resource for detailed information / revision and to accommodate any differences between driving a simulated car on this simulated track, compared to racing bikes and sidecars around the real Course.

Going further, I should explain why this guide was written in such great, even painful 😊 detail.

I originally used this exercise of writing down the characteristics of the Course, to crystallise my thinking about how to finish constructing the GPL track as accurately as I could, reflecting how I [and Ken Murray from his input] thought a 1960's G.P. car should behave at speed here. It is incredibly difficult to drive and develop an evolving track like this during the early stages of development, when there are no visual clues due to the lack of scenery!

At the same time I had intended to make my observations on driving the Course more widely available in some form, to provide assistance for those of you who might think the track too daunting, or who struggle to work out why their car behaves in a perhaps unpredictable way at certain points, or who need fresh insight for improving their speed through certain sectors.

I wanted people to enjoy the track, appreciate it's challenges and not be turned away by it's perceived complexity.

It made no sense to me to then condense my notes into a broad summary. So you have detail; lots of detail, on the route, gear selection and through that, approximate corner speeds, trouble avoidance, identification of and tactics for driving corner sequences, plus a few go faster tricks, learned from experience. 😊

It's your job to skip the parts that don't interest you!

If, as I suspect, this only helps a very small minority of you to appreciate and enjoy the track more, then the time taken to write it down will still have been well spent.

As an added feature, [Ken Murray](#), Manx GP and TT racer in a variety of classes and different machinery over eight years, has graciously allowed me to reproduce extracts of his own handwritten course notes. These add a useful succinct insight into the development of knowledge and technique from someone who faced the real exhilaration and real dangers of this Course.

Just remember that Ken's notes mostly relate to riding seriously good, purpose built racing bikes, his favourite, a Yamaha TZ350G, on which he could negotiate some sections quicker and on tighter lines, than any 4 wheeled vehicle!

Thanks Ken for that and for your assistance in verifying and suggesting improvements during the Alpha construction phase of this GPL track.

Recommended Approach – Learning The Mountain Course In A Car Simulation

Some simple techniques are suggested below for learning and enjoying such a long, historic, challenging and ultimately, very rewarding track to drive.

Most of you will want to get straight out on the Course and go for a drive or a 'fang' around when you first download it. I know I would if I were you.

Doing that you will have fun, perhaps be distracted by the scenery, great variety of challenges presented and crash a lot at first. Some may not care to learn the track in any detail; so certainly won't read this guide, which is fair enough. Some will be daunted by the Course and quickly move back to their favourite easy short circuit's, which will be a shame.

It's the 'nature of the beast' though, that long tracks do require learning commitment, something that can't be avoided. Remember your first few outings on the Nurburgring Nordshleiffe in Grand Prix Legends? How difficult did that feel at first, yet how much satisfaction did you eventually derive from persevering with it? Such long tracks are almost like a stand alone Sim within a Sim.

It's the same with the Isle of Man Mountain Course. The track may be two and a half times the length of the Nordshleiffe at 61 km, and have 50% more corners, but IMO is no more difficult to learn.

However, if you have a short attention span or get frustrated easily, this is not the ideal track; [or bedside reading] for you. 😊

Learning by Observing

1. Study the Real Track

The absolute best thing to do to prepare for his GPL track would be to study one of the many DVD / YouTube Videos of the Course, making sure there are some on board laps on bikes and sidecars.

Study these full laps; note the corner sequences, braking points, gear selection, places where the riders back off and most of all their personal commentary. Much of this detail should be valuable as you tackle this simulated Course.

Just remember that video images most often use a wide angle view, so distance perception will be distorted and objects, corners etc, will look further away than in real life. Even more importantly, elevation changes are flattened considerably on screen; i.e. these are much steeper in real life.

2. Sit in the cockpit of the Replay(s) supplied and observe/listen for visual and aural clues to;

Braking points,
 Corner entry lines,
 Corner entry speeds,
 Corner sequences,
 The effect of severe up slopes and down slopes on cornering, acceleration, braking and turn in,
 Gearshift points both up and down, and
 Throttle use.

On track, you will most probably experience repeated difficulty at particular locations at first. Different locations for different drivers.

It may be that you just can't get through the Bottom of Barregarrow cleanly, or you can't find the correct way to brake for Quarter Bridge or Greeba Castle.

Going back to a good reference replay and noting the aural and visual clues at the point of entry/braking point for these trouble spots can help immensely. Certainly there are a lot of corners and corner sequences, but they mostly have unique surroundings, or represent recognisable and distinctive short sequences, which should help you to recognise and remember them.

Eg; when you realise that you have to start backing off and braking before you turn into the descent to Quarter Bridge, because you can't use more than ½ brake pedal to avoid lock ups so steeply downhill; or that you brake for Greeba Castle in three separate phases, the last of which starts when you see the telephone box. You will start to accumulate permanent visual trackside references that will quickly be stored in your subconscious. You won't even have to think about them consciously after a very few laps and that will build confidence.

A Note About "Grooves"

In reality, long tracks like the Isle of Man just don't 'rubber up' like short circuit's, because far fewer laps are driven.

Even after two weeks of Sidecar and Solo Bike racing with wheelies and wheel spin during TT fortnight, *there is no full track groove at the Isle of Man.*

Despite this, I have included a normal track "groove" here, to at least assist people learn hard braking points.

In my view it's better to look for trackside visual clues as reference points instead. The real racers do that.

Learning In Stages

It may be useful to learn the track detail in stages. This is what the real riders actually do.

See Ken Murray's Summary below.

Learn to go fast out to, say, **Crosby** first. By all means continue on at a moderate pace around the track, but concentrate on developing your lines and braking points and brake pressure in smaller segments of the track at a time. You will find if you do that you will start to "bank" your experience and the next sector, say **Crosby** to **Ballacraine**, will be easier to learn because you are approaching it mistake free and confident, with the car under control, tyres at the correct temperature and at the correct speed.

Use the aids provided in the OPTIONS MANAGER UTILITY. Audio Pace Notes , Speed and Direction Indicators and also Track Location Names should all assist in the learning stage. When you have it "covered" I encourage you strongly to turn off these aids, relying thereafter on your memory and learned skill set. More pleasure in that methinks! 😊

Road Track Technique - Car Control

Think for a minute about "road track" technique. I'm talking about *real* public road tracks here, not some general label attaching incorrectly to purpose built, wide and smooth racing tracks with a few corners in each direction, like Monza, Watkins Glen or Silverstone, good as those short circuit's are.

What I mean is, how differently do you have to drive on a track with;

Large numbers of consecutive or combination / multiple apex corners?
 Lots of blind or semi blind corner apexes and exit's?
 Lots of minor and major undulations and elevation changes?
 A narrow fast driving surface with almost no runoff?
 Lots of bumps of different amplitudes?
 Corners that tighten or open out?
 Small curvature kinks or long radius serious bends?

My recommendations are as follows.

Use conservative or very controllable setups with

- Harder front sway bars;
- Harder front Shocks;
- Harder front Springs; and
- Higher ride height,

than you use on short circuit's.

Use two to three times as much rear + toe in [about 1 cm or 0.4 inch] and less front - toe out. This helps to stop the car being bumped off line by the rough/undulating track surface. It also assists you to flick it into corners slightly sideways more aggressively with lots of control, plus brake much straighter and a little harder than with normal setups.

Sounds strange, but trust me, it works!

Concentrate on front end grip and stability during braking/corner entry and rear wheel grip under power on corner exit.

Try to brake conservatively to be under absolute control at corner entry, especially for tight corners. You just can't expect to trail brake everywhere here! The bumpier the track or more downhill, the less brake pressure you will be able to use safely, so braking distances are longer

Fast out. Be slow enough to get the entry line right and actually meet your intended apex, so you can obtain the best exit speed, instead of overshooting the corner and slowing after the apex. Useful on all circuit's, but especially so on this narrow one.

*Anticipate! by turning in **early** to most of the fast or semi blind corners,* to allow for four wheel drift away from the apex and/or *your delayed reaction to late visual clues.*

Get used to the idea that *the fastest way to get through multiple corner combinations is often NOT to use the entire road on exit of some of them and NOT to try to meet the apex of some of them!* Which ones? Read on!

Practice use of partial throttle and partial brakes. Tyres don't provide maximum grip while steering or braking at the same time! Light or "trailing" throttle to keep the diff on the power side for stability and a lot of half throttle through the many corner combinations for a smooth, fast passage. Squeeze the pedals on and off smoothly. Get impatient and regress into short track style "jamb it full on then take your foot off suddenly" and you will be in a hedge or wall very quickly; or just be very slow!!!

Think "smooth"Think "finesse."Think "maintain safe momentum".

Ken Murray's Course Notes

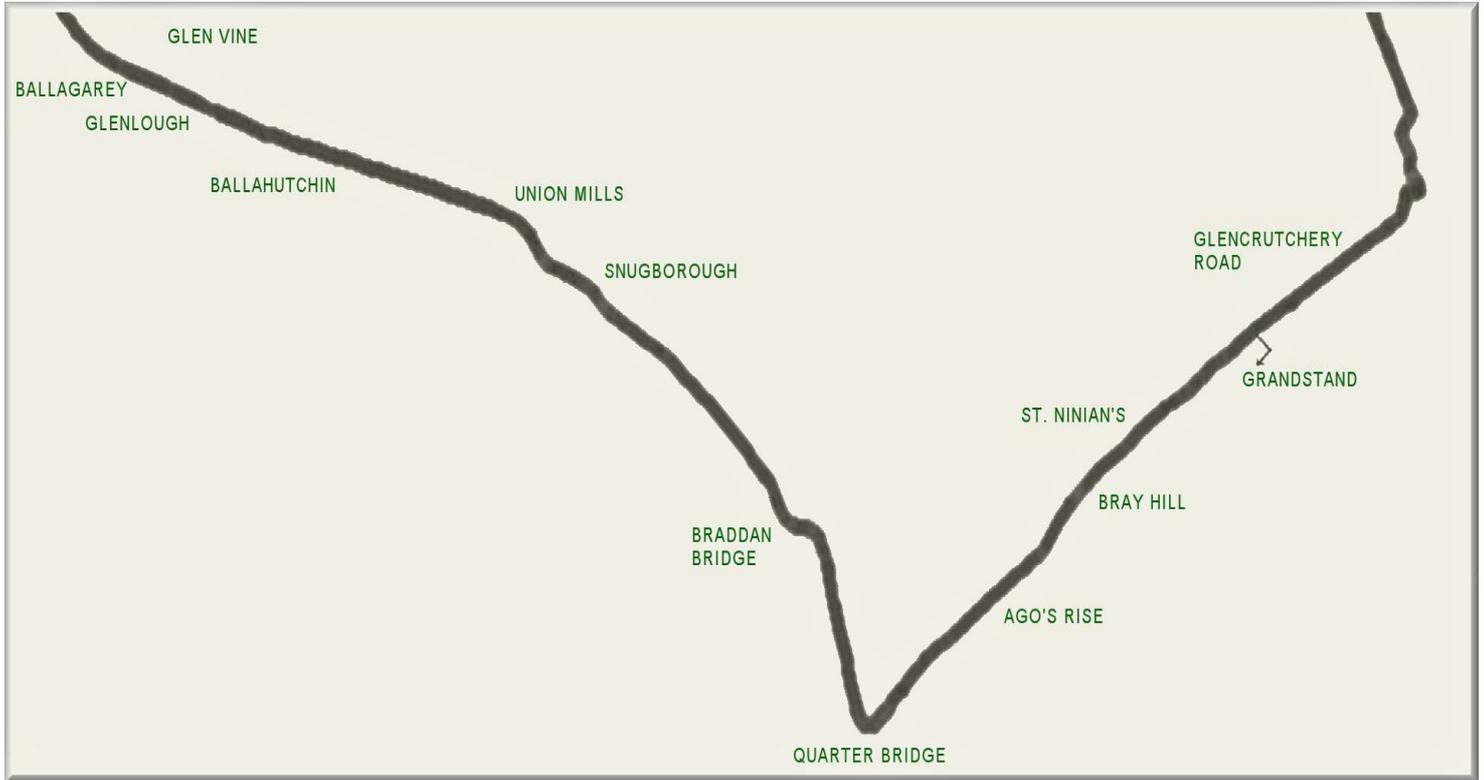
Gate of Man TT Course Notes

Ken's notes from 1992 are presented thus. You can see from the notations and amendments to them and this summary of his, how he developed his knowledge and increased his speeds over time.

- Parts of course to try and improve on
- 1/ Slow corners ~~Quarter bridge~~ Quarter bridge, Braddan Ballaugh, Parliament St, Sign post, Sulby bridge.
 - 2/ Bottom of Barreganow. Try to take faster. somey yubied
 - 3/ Entry to Kirkmichael. Brake later and don't slow down as much. Accelerate harder through Kirkmichael. ✓ Done ✓
 - 4/ Try Alpine in top but be careful. ✓ Done ✓
 - 5/ Try Milntown cottage in top. Again careful.
 - 6/ Try Conkerhob flat out. ✓ Done ✓
 - 7/ Brandywell. Get line better and faster through first right hander. ✓ Done ✓
 - 8/ 33rd. Try in top. Careful. Turn into lefts corner. ✓ Done ✓

FULL MOUNTAIN COURSE GUIDE IN SECTIONS

Start at the Glencrutchery Rd, Grandstand to Ballagarey



Text highlighted in blue refers to places where I believe you need to be particularly careful!

Ready to accept a little challenge?Off we go then!

From a standing start it's full acceleration on cold tyres slightly downhill. If traffic allows, go close to the high walls on the right, then aim for the left edge of the intersection with traffic lights and bridge known as **St Ninnians**. Anticipate the bump here and you should have no trouble moving across to the right hand side of the road again to the top of **Bray Hill**, still at full throttle. The road takes a slight right kink then immediately turns left and descends **Bray Hill**.

Even the biggest bikes take this steep hill at almost full throttle, including the right hand compression turn at the bottom. *In a wider car, you will need to 'roll off' to a trailing to half throttle as you turn and descend to the left.*

Bray Hill - St. Ninnians, bottom and exit. Flat out behind bubble.

Turn left before you see the road go left, then aim to hug the left of the road next to the double yellow lines as you descend the steepest part of the hill. *The car must be very stable and straight here, then turn early for the right hander at the bottom of the hill,* You need to give your front tyres time to grip and start turning the car [especially if cold] because they are not under normal loads. Just miss the right hand curb at the bottom still on a low throttle and only then go to full throttle over **Ago's Rise**. You are then in good shape to continue safely.

If you try to carry too much speed through the bottom you may be off line and down on your bump stops, losing much of your stability and car control. This will usually move you too far left which will result in loss of exit speed while correcting your line or quite often, just leads to a crash. This is a **DANGEROUS SECTION** so please treat it with respect!



Bottom of Bray Hill

A short straight after **Ago's** and the following rise, then ease the car to the right hand side passing the last tall white kerbside house, to prepare to start the moderate left turn at the top of the Hill leading down to **Quarter Bridge**. *This is one of the many semi blind corners where you need to start turning before you see it all properly,* so ease back to a trailing throttle, take the slight left turn keeping well left hugging the tall hedge. Anticipate the loss of grip from the abrupt start of the descent and the intruding adverse camber of a left side road junction. *As soon as the car settles and straightens, start braking lightly and then progressively harder, but never fully.*

The car will not accept hard braking downhill here. Shift down progressively but not too early to the lowest gears, which would unsettle the rear wheel grip. You should have enough time to get into first gear, but do this only just before turning right into **Quarter Bridge** intersection. *Drop into first here before you get down to corner entry speed and I guarantee you will end up completely stopped and facing back up the hill! You just cant cheat **Quarter Bridge!***

It looks like there is a lot of room and appears as if you can turn at a reasonable speed, however this is a very slow first gear corner without any helpful camber.

Quarter Bridge - First gear. Main braking after hump in road. Slip clutch on exit.

Accelerate now towards **Braddan Bridge** and on your second and subsequent laps; look for your **PIT BOARD** showing details of the lap just completed.

Start braking at the start of the lane divider markings and ease the car to the right hand side of the road. This next left/right corner combination offers lower grip in the entry left hander, than the exit right hander, because there is much more helpful camber in the exit right. So brake more than you think you should to a slow second gear pace for an early turn in to the left, anticipating little grip, then try to get some throttle in on exit of the right, but be careful the camber doesn't "hook" you up and drive the car into the right hand curb.

Accelerate hard past the church and on to **Snugborough** through two left hand kinks, both of which can be taken at full throttle. Watch the second tighter uphill one doesn't catch you out for the entry is bumpy. Go close to the left wall and you should be fine.

Brake steadily from the low point of the shallow depression at **Snugborough**, about where the lane divider starts and shift back to third through the shallow right, then down to second as you turn into the next left, but *be prepared NOT to use all the road width on exit, for it's essential to stay close to the wall on the left for a clean entry to **Union Mills**.*

CARE. The most important thing to keep in mind here, as with other slow sections followed by long full throttle sections, is that any loss of exit speed from the last slow corners will lose you seconds in lap time due to lower speeds on the following straights.

Union Mills - Jockey entry, down two gears?

Stay in second through the downhill right then left approach to **Union Mills**. Back off the throttle slightly through this left to avoid losing control over the sudden small drop off there. *Don't use all the right side of the road on exiting this left, because just at the shop ahead, there is a jutting curb on the right.* Get your line correct in the middle of the road and you can accelerate hard from just before that curb, all the way to **Ballagarey**.

Accelerating hard from **Union Mills**, there is some respite from deep concentration as you race up **Ballahutchin Hill** over undulations and one easy right hand sweeper towards **Ballagarey** at **Glen Vine**. Through the moderate depression of **Glenlough**, get over to the left side.

Just as you start emerging from this depression, back off the throttle, brush the brakes lightly and start turning the car slowly to the right, before you see the corner ahead. You should now be on a trailing throttle and will next see the sharp, intrusive angular curb of **Ballagarey** on the right. Just miss this while still turning and at about 40 mph below top speed, in top gear or preferably the next gear down. Start accelerating from there but watch the left hand walls, for the right hander continues, although it does open out.

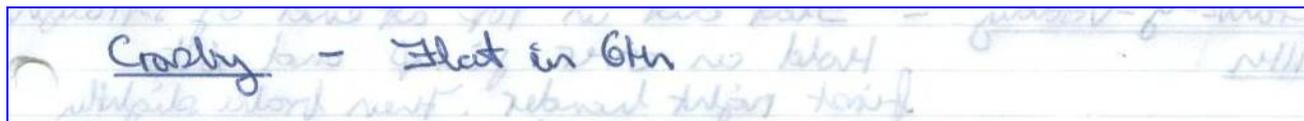
This is another **DANGEROUS** spot. It's not known locally as **Balla-SCARY [sic]** for nothing. Get it wrong and you are seriously slow on exit or into the curb or walls. Get it right and you can gain seconds from a high speed exit, as almost all of the next few miles to **Greeba Castle** can be taken at full throttle. Only when you know the blind line here perfectly, can you afford to keep more speed on out of **Glenlough** and perhaps gain a few tenths.

Glen Vine - Flat in 5th getting sixth down to Coakby.

Ballagarey to Sarah's Cottage



Flat out down the hill, past the shops, be on the right hand side by the time you pass the big church on the left, but watch out for a drain cover on the extreme right edge of the road. This is irritatingly placed at the turn in point for the **Crosby** left hand sweeper. *Back off just a little, still in top gear to get some weight transfer and front wheel 'bite' and ease the car towards the left wall as soon as you see the wall turn away left ahead of you. You have to turn very early to meet this apex at speed.* Miss the apex and you will have difficulty avoiding the intrusive right side curb on exit; the place where tragically, big David came off in practice some years ago. I have placed a marker there!



There is immense satisfaction to be had from getting through this **Crosby** sweeper at near full speed in the '67's. In the '65 chassis it can always be done without lifting, using the correct line. It's then full acceleration through **Crosby**, past the shop then Pub and up over the **Coach [Wagon] and Horses** jump. Ease the car to the right side of the centreline markings up the hill before the jump. This will line you up for continued accurate full throttle driving by shaving the walls on the left side, while turning slightly left on the following descent and then on, to well past the **Highlander**.

The **Highlander** is a small former pub on the right, half way along a straight flat section after your descent from the **Coach [Wagon] and Horses**. Ahead you will see the road curve gently uphill to the right, but beyond that is a deceptive section. By now you will have spent so much time at full throttle that you have to force yourself to remember to brake when it doesn't look necessary. *Massage the brakes softly to wash off some speed just before the road first turns right and starts a lazy climb. Keep to the right hand side, applying more brake again and shifting down two to three gears after the right, through the next short undulation.* This prepares you for a tightening second gear left with little grip on exit, because it's on a crest.

You should be slow enough to go through that semi blind left without using the brakes in it, and it is difficult to judge the line precisely. Keep the car turning left on a trailing [light] throttle until you are sure you have a good exit line. *Running out of road on the right will be a common mistake here.* You can then accelerate again briefly, grabbing third, but brake again lightly as soon as the telephone box comes into view down the steepening hill, which signals the start of the left / right combination at **Greeba Castle**. This is a second or third gear S bend section through a pronounced dip. *The only tricky part is the last half of the exit right hander, which has no camber and is also over a crest, so hold a long tight right side apex and avoid aggressive acceleration until you are almost through it, or again, you will run out of road, this time on the left.*

This sequence is important to memorise, using all the trackside visual clues. Do so and the speed you have maintained from **Union Mills** through to the **Highlander** will not be wasted. You are now set up to deal with the tighter **Appledene** section.

Greeba Castle - Hold on as long as possible on way in (left) and then down two? ^(Camber)

You now enter a short series of enjoyable medium speed corners through **Appledene**.

Appledene - Accelerating from Greeba Castle up gears and hold this gear just throttling back slightly.

Keep a fairly constant third gear pace and memorise the main four turn sequence of undulating left/right/left/right. Accelerate hard only after exiting the second uphill right hander, as the road flattens there after a slight crest, a feature that initially inhibits your ability to turn and yet can still cause snap oversteer under power on exit. *With experience though, the fastest way is to try to flick the car a bit sideways to the right, just before the top of the crest, which sets it up for a fast exit line to the right.*

A couple of last twists in the road can then be almost 'straight lined', before immediate heavy braking after the last of these from fourth gear down to second, for the slight rise through the left at **Greeba Bridge**.

Greeba Bridge - Next gear second part Appledene. Down two for Greeba Bridge. Road opens on exit with some ripples.

That tighter technical section behind, it's now flat out most of the way to **Ballacraine**, before another slower technical section through **Glen Helen**.

Now at full throttle past the **Hawthorn Pub** the road turns right through two fast kinks, the first opposite some big stone farm buildings on the right. The second kink effectively drives slightly tighter than the first and is just a bit too far along for these to be taken as one long right hand corner, because the road between them bends ever so slightly left!

Haulhorn - Flat out through both corners.

The best technique is to back off briefly before each kink and try to flick the car sideways. At these speeds though all you will do is point the car a bit more to the right, without real oversteer, which is exactly what you want. This also washes off some speed without the need for any braking and puts you on a good line for each exit. Avoid **Joey's Lamp Post** on the left road edge on exiting the second kink, then charge off down the road at full throttle again, enjoying a little 'air' at the **Ballagarraghyn** jump before commencing some very heavy braking after the last left hand twist in the road.

There is no definite answer to deciding where to brake for **Ballacraine** intersection. This is a slow-ish, not quite right angled, second or even first gear right hander, so you need time to wash off some serious speed. Probably as soon as you settle after the jump, or see the **Ballacraine** Pub clearly, the pinkish building ahead, is as good a time as any to get on the anchors, if you don't want to join George Formby in the front Bar. At least you can afford to brake fairly hard on this level, if bumpy section.

Ballacraine - Brake hard, taken in second gear.



Leaving Ballacraine

After **Ballacraine** accelerate hard up the hill to **Ballaspur**, braking and changing down one gear for the blind left at the top of the hill. Slow down, otherwise you will end up in Milky's straw bales on the right hand exit! A tight entry to this opens out then veers right in two phases, allowing you to accelerate moderately over the brow of the hill and then through another right, after which you can accelerate hard down the hill and straight through the shallow 'S' bends over the unseen **Ballig Bridge**.

Now comes the tighter but enjoyable **Glen Helen** 'section'. Brake just after the hump of **Ballig Bridge**, slow to third on the right hand side then approach the longish **Doran's Bend** left hander at half throttle, turning early but aiming to make an apex just around the corner out of sight as you first see it. *This is a deceptively long corner, so don't turn the taps on until you can see the exit clearly.*

Exiting **Doran's**, you can afford to increase speed through a long shallow undulating right, even though you can't see much of the road ahead. The road then starts to tighten progressively into a medium radius right with a slight double apex over a crest. *Stay left, missing the first apex but start some easy braking while turning in tighter over the back of this small crest, to make a close pass by the second apex on the right. Care here because the car will feel light over this crest.* The road then turns hard left semi blind behind the high bank, but immediately opens out. That is, it has a small radius but not much curvature. So this last left before **Laurel Bank** looks tighter than it actually drives.

You will find that until you get your lines and speed right through here, this last cresting right will cause you a lot of grief, but the following left will be one of those corners where you will always think "I could easily have gone faster or accelerated earlier through there!"

In my view, that is about the trickiest part of the **Glen Helen** section. The rest is comprised of more straightforward corners mostly in isolation until it's end.

A short burst of acceleration takes you to the first gear right at **Laurel Bank**. Using all the road width, easy in and fast out is the 'Gee-Oh' here.

Laurel Bank - Back up one after Dorans and down 2 gears while cranking into first part of Laurel Bank. 2 gears down? Hold this gear and down one more for Laurel Bank itself

From **Laurel Bank**, accelerate smoothly through an easy left, then use a trailing throttle over the small unsettling crest in the next right. You will see the old **Black Dubh** petrol station buildings, a group of white buildings on the right. The road disappears around the bank to the left then drops away out of your sight, so be prepared for that and the back end trying to get away from you by turning close to the bank on the left and backing off as you turn.

It's a thrill to drive that corner correctly, allowing yourself just a touch of rear end drifting indulgence. 😊

Black Dubh - Up two gears after Laurel Bank and hold this gear all through series of bends to Glen Helen. 2 gears down? Hold this gear and down one more for Laurel Bank itself

Next is a tightening double apex right. Keep a moderate throttle through the first part and stay in the centre of the road, missing the first apex, in order to have the ideal wider line to turn into the second apex. *Accelerate only when the second apex has been lined up properly otherwise you will definitely run into the bank on the left.*

Now up a short straight through a left kink with lots of helpful camber for which you will still need to slow a bit, another short straight then slow and change down for **Glen Helen** proper, essentially a left / right / double apex left, second then possibly first gear combination through a rise then dip.

Glen Helen - Down one gear at first left hander and down one more at second? Hold this gear and down one more for Laurel Bank itself

Hard on the throttle after that, aim for the left of the road before **Sarah's Cottage**, soon in sight up the suddenly much steeper hill with it's pine tree on the left. *Brake more and earlier than you think you should for the first/second gear right hander here, because even though this is an uphill corner, it is easy to overshoot the blind*

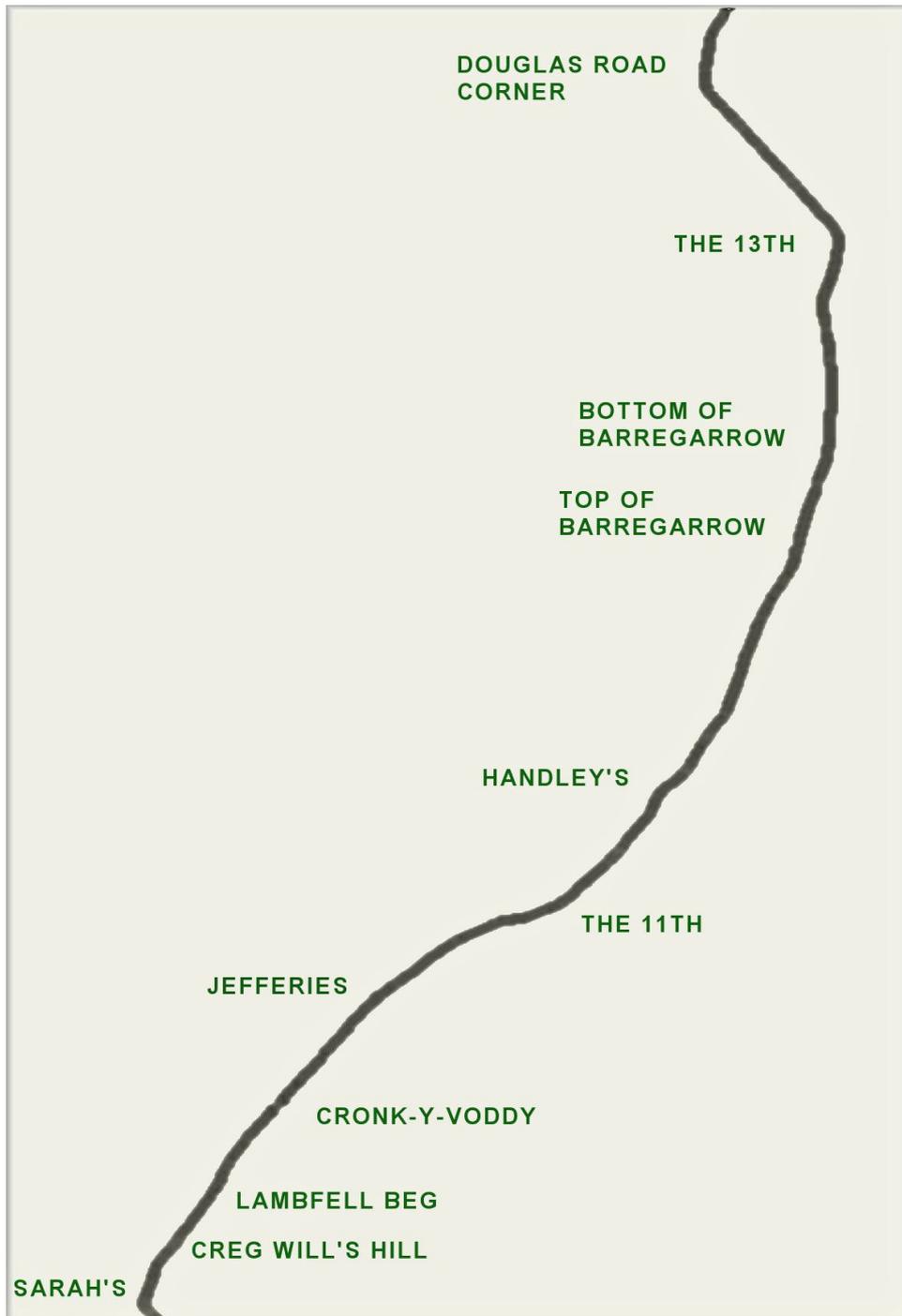
apex. If you do, you will kick yourself, because you have just compromised your exit speed, and will be slow all the way up the steep **Creg Willy's Hill** and along the **Cronk-Y-Voddy** straight. This is a corner in isolation, but an important one for lap times. Don't be impatient with it. Slow in, feel for front end grip, turn in hard, then accelerate away early and aggressively. The hill will blunt your exit speed, so you can use a lot of throttle if you have met your apex.

Sarahs - Up one gear up the hill and down again or hold in best gear if exit from Glen Helen not as good. Up one gear before Creg Willy's hill and hold this through S bend.



Sarah's Cottage

Sarah's Cottage to Douglas Rd Corner, Kirk Michael



Creg Willy's is a bit tricky at first, but like **Appledene**, it is fairly easy to learn the corner sequence and then you can almost accelerate at full throttle through all these uphill bends. Accelerate through the first left then stay wide exiting the next right, as it's actually a double right that can be taken as one continuous bend. Through the next left kink it's a decreasingly steep straight at full throttle past some farm buildings.

The next kink is semi blind, because it's partially lost in the background and receding brow of the hill at **Lambfell Beg**. Trust that you need to veer left close to the wall then steer the car back right but not too quickly, all at full throttle. You will have threaded a small chicane in the road and only have one more slight right hand kink, before taking a few deep breaths with right foot hard down, along the bumpy **Cronk-Y-Voddy** straight.

Cronk-Y-Voddy has two shallow depressions. Be sure to place the car to the left at the end of the second one as the road flattens after the last crest, then almost immediately start turning slowly to the right, backing off to three quarter throttle. Line up the apex to that sweeper **Jefferies** * and go back to full throttle as you meet it. You will then drift nicely to the left of the road and remain straight over the slight bump and big dip which is the approach to **The 11th**.

* Apparently Big David was always 'flat chat' and seen to be physically manhandling his Superbike through here, a simply awe inspiring sight, from accounts of those who were privileged to see it!

NB: Just as an aside here, there are several places on the track that are always referred to by these numbers, rather than place names, this being the first of them. The reference is to milestones, or more correctly, the number of miles completed out of a lap of the full 37 ¾ mile Mountain Course.

Approaching **The 11th** the road goes downhill through a depression, a small rise, two rights and two lefts. The second right and first left are relatively close together, plus only the two rights have positive camber. The first of the two lefts is **The 11th**, also known as **Drinkwater's Bend**, and has tricky negative or adverse camber on entry.

This downhill sequence requires the following technique. Stay at full throttle up to the end of the depression; back off to half throttle before the first right, ease off further to a trailing throttle at the second right and just caress the brakes lightly, to *be slow enough to stay on the right hand side of the road after that second right*. This is the key move, because you will then be at the correct speed and in the correct position to safely negotiate the first negative camber left at **The 11th** and then accelerate through the second left at full throttle all the way to **Handley's Corner**.

End Cronk-y-Voddy - Flat out in top at end of straight.
 end 11th
 Hold on over first and into first right hander. Then brake slightly and down one for second right and through left! - (also about 1000)

Handley's is one of those corners, like **Hillberry** near the end of a lap, where you anticipate it coming for almost too long. You have far too much time to think about it and in this case, the total disappearance of the road and those high stone walls, for your own good; i.e. it has mesmerising qualities. It is a tricky left / right corner combination in that it can be difficult at first to learn the entry line and subsequent fast change of direction, yet this S bend really is faster than it looks at first glance.

Handley's also has a blind exit and is all about line and timing! *Be brave! Shave the hedge on the left approach in third gear, on a trailing throttle and with the car stable after braking. Then almost immediately, flick it over to the right to nearly graze the high stone wall just past the steps.* Trust it, do it and **Handley's** will spit you out the other end straight and accelerating and perfectly aligned over the yellow drain cover on the right centre of the road, wondering why you were concerned about this natural chicane. Mistime the turn back to the right and well, you are not going anywhere in a hurry!

Handleys - Brake as late as possible and down ^{one} two gears?
 accelerate through gears through reset series
 short section of bends, go with black line

A short bumpy sequence of left/easy long right/downhill left, the last of which was recently named **McGuinness's**, in honour of multiple TT winner John, is followed by a longer undulating section, past the "Manx House" to the church at the **Top of Barregarrow [pron. Be-garra]**. The left at **Top of Barregarrow** is approached through a lazy right hand sweeper and a small dip, so back off sufficiently to a third gear pace, to keep the car under control and avoid hitting the right side banking on exit, an easy mistake to make.

The steepest and possibly scariest section of the whole Mountain Course now awaits you!

Accelerating hard, increasingly steeply downhill and turning ever so slightly right, **Bottom of Barregarrow** suddenly comes into view. Walls on both sides of a narrow, tight radius, small curvature, switch back left hander at the bottom of the hill; this has a nasty camber drop, which curiously, only starts half way through the corner. Because the steep hill also levels out abruptly here, there is added complication in that the car is under severe suspension compression as you turn. Bikes often bottom out their fairings between the wheels at 150+ mph here.

Scary corner? Yes, but with the correct technique, you can thread the eye of this needle fairly easily each time. So slow down to a moderate fourth gear pace while learning it, get to the right hand side as the road jinks further right just before the left, then turn through the left on a trailing throttle, aiming to just miss the wall in front of the white house at the apex. *As you do, very sharply counter steer a quarter turn to the right, before you feel any need to do so. This is the critical move.*

You need to do this because the camber change mid corner will throw the car very, **very** abruptly into oversteer at any serious pace. Anticipating this with counter steering will keep you straight, on a tight line and in control for a fast exit. *If you haven't started to counter steer before you feel the car oversteer, you won't react quickly enough to catch the rear end in time and you will spin or run out of road!*

It took me a long time to work out you needed to do this, so trust me and yourself, it's the best way to go fast safely through here. The alternative is just drive it slowly.

Barregarrow - Shot out through top and throttle back through bottom slightly. (Should be flat out)

Always a relief to get through **Bottom of Barregarrow** intact, take another breath as you head along an undulating and fairly straight section with one easy kink towards **The 13th**. The only tricky thing about **The 13th** is the entry speed to this close sequence of corners. *The first right is on a crest and the downhill exit is slower than the radius suggests.* A moderate third gear pace after braking smoothly should set you up for this, plus the next easy left. This leads to a short steeper descent to a long double apex left hander at the bottom of this small hill. Miss the first apex and meet the second one. Exiting this in second gear, you climb decreasingly onto the long straight approach road to **Douglas Rd Corner** and **Kirk Michael**.

13th - Brake late, down ~~one~~ ^{two} and hold this right through series of bends.

About fifty metres after you feel a small drop off in this straight section opposite two trackside houses, it's time to ease on the brakes for **Douglas Rd Corner**, an easy moderate radius third gear corner in isolation, leading into **Kirk Michael**.



Approach To Douglas Road Corner

Douglas Road Corner to Quarry Bends



After Douglas Rd Corner, a short straight follows to the next descending right, through which you should try to hug the right hand side, because the car will want to go straight on.

From there, the village houses and shops crowd in on both sides, but take no notice. Go to full throttle and concentrate only on line! The road goes lazily right then through a very short left kink. Get to the right before this then straight line the kink, just missing it's curb and you will emerge safely on the right of the road then down through a dip in a straight piece of road. As this starts to ascend again, stay on the right hand side and back off slightly to a slow fourth or third gear pace, ready to tackle the **Kirk Michael** exit sequence.

*Kirk Michael entry - Brake late and down two.
Accelerate hard through village up gear*

Now it's time to think.... Yellow Line, Yellow Line, and Yellow Line; as there are double yellow lines at the apex of all three corners.

The first is just a fast left kink with a short straight following, the next a longer curvature right hander and the next, which follows more closely, a bigger radius left with even more curvature, so the exit to this last bend is a long way around. Tackle these as a constant paced half throttle S bend combination, *be prepared for very quick slight changes of direction*, closely meet all three apexes and hold the inside line in the last left hander until you can definitely see the exit.

Don't get impatient and try increasing your throttle application until well past the apex of the last left because if anything, *this sequence is one requiring slightly decreasing speed*.

Do all this and you will suddenly be out in the countryside again, looking past the petrol station, salivating at the immediate prospect of **Rhencullen** ahead and the fast **Bishop's Court** section beyond that.

Rhencullen starts as a very short rise approached virtually straight. At the top of the rise the road kinks ever so slightly left, flattens and straightens before entering a medium right that exits downhill known as **Birkin's Bend**. The road then immediately scoops and sweeps through a fast opening left hander, up over a small rise with a drop away slightly right, then down a hill towards **Lyndhurst** and **Bishops Court**.

The entire key to this section is the exit line from the right hander after the top of the first rise. The situation is similar to how you drive Malmedy at the old Spa Circuit.

Back off the throttle as you take the first rise on the left hand side, dab the brakes then ease the car to the right in 3rd gear, aiming for a late but close apex just after the houses as the road starts to descend, on light throttle only. The objective is to exit this right hander so the car only drifts to the centre of the track, not all the way to the left hand side. Get this line and exit speed correct and you can then gun the throttle from the start of the left turn from well before it's apex and keep it flat out over the second rise with it's intoxicating jump and down the next hill. *Be too exuberant in the first right, or take too early an apex for it and you will be backing off to negotiate the left hand sweeper, instead of accelerating through it!*

Rhencullen - Top gear through sweepers at exit of Kirk Michael. Over jump and down one. Through 'S' over second jump and up into top.

Lyndhurst then **Bishop's Court** are next. The approach is straight downhill at first for a bit, followed by a long fast right hand sweeper, characterised by two slight crests within it. Back off slightly as you crest the first of these, let the car settle in the next dip and not too far to the left, then you can open the throttle wide again over the second crest with impunity and on through a fast left / right set of sweepers after **Bishop's Court**.

Following a short open aspect straight you dive left at a good speed through a series of fast kinks. Then as you approach **Alpine Cottage** the turns get slightly tighter but shorter, so you can't see as far ahead. Maintain a steady but not aggressive pace through the slight dips and turns then down to third before the last rise through the left immediately before **Alpine**, which is simply a house in a field on the left behind a big cypress tree. At **Alpine**

itself, the right hander opens out and is followed by a series of easy to follow almost flat out sweepers. The last short left of this series is slightly tighter and then it's a flat out drive through a long opening right, then along a straight with kink to **Ballaugh Bridge**.

Alpine - Flat in top from Rhencullen. Down 1st gear
and 2nd for Alpine and up again on exit.



Alpine

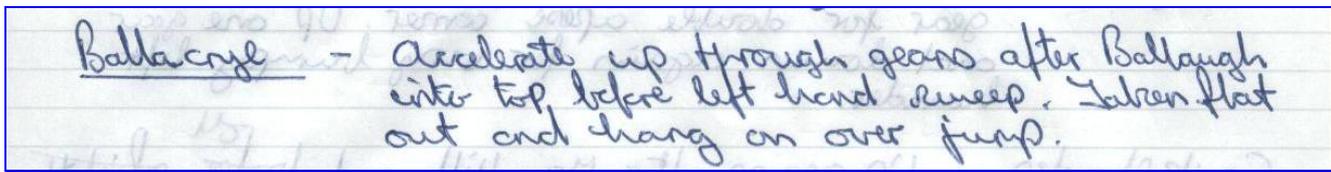
Ballaugh Bridge is famous for its slow S bend humpback bridge, over which bikes get some serious low speed "air". After travelling for so long from **Rhencullen** at high speeds, *you have to remember to brake early enough and to quite a low first or second gear speed.* Fortunately the braking area is level, if bumpy, and you can see the entry to the first left turn from a long way off. Start your braking from just after the slight kink in the approach straight and you should have enough time to slow. The approach left and jump over the bridge is easy if you are slow enough. Just wait for the car to land and settle before accelerating through the next left that leads out of the village.

Ballaugh - Flat out through sweepers on approach.
Brake late down to second gear. Front
wheel landing but with enough speed to get
going again quickly.

Full throttle now through a couple of easy fast rights. Make sure you wave to Gwen, seen spectating behind her fence at the last white house, then it's slightly downhill as you approach the left before **Ballacry**. *This turn is deceptive because it's a double apex turn; with the first part of the turn just a slight kink really.* Brake lightly, then

stay wide of the first apex, turning only when you see this clearly off to your left and you will be in the ideal position to turn hard through the second tighter part of this curve, making a close pass on the second apex.

Exiting fast on the right hand side of the road, make sure you have the car straight so you can accelerate hard over the jump that quickly arrives at **Ballacrye**.

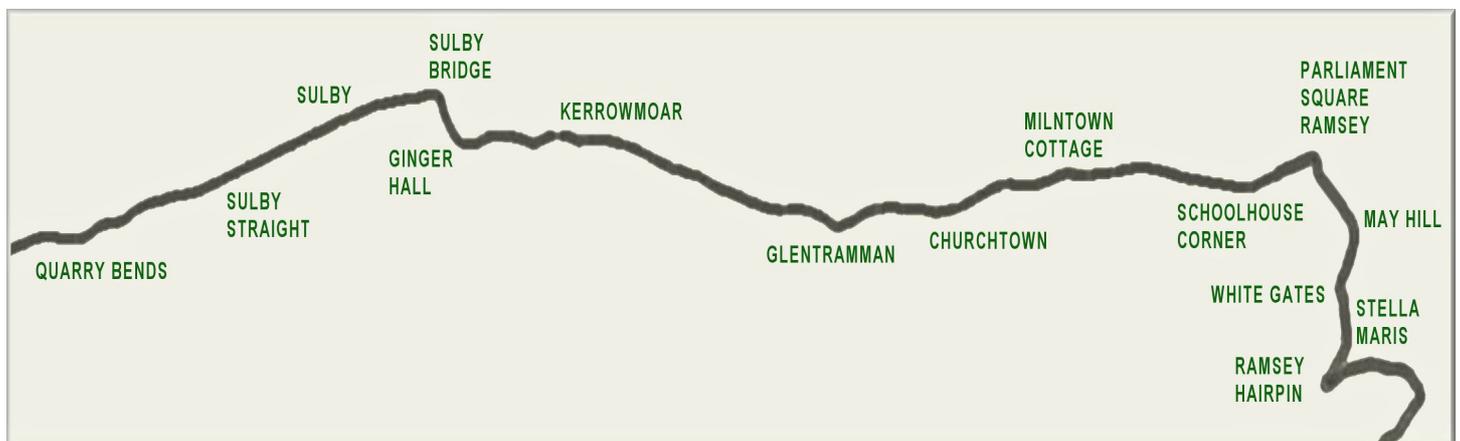


The road continues fairly straight then through some very gentle long rights and lefts. These can be driven flat out and you can see a long way ahead. When you start to see the bends shorten, some straw bales and the road disappearing to the right, it's time to slow through a slight double dip for the fast third gear right that signals the start of the **Quarry Bends**. *Time to concentrate harder again for a bit and make sure you achieve a close apex here!*

Exiting this, you only just have time to get the car to the right hand side of the road in a short straight, before braking and setting it up for an early turn in to the first of the bumpy four central **Quarry Bends**. These comprise a double S bend combination; that is, two bumpy alternate lefts and rights, reasonably close together and fairly evenly spaced. A nice set of corners to test your ability to meet a series of apexes, which are best taken at only lightly fluctuating throttle applications. No point in trying to accelerate and brake hard before the first three of these very much.

The only thing to be aware of is that like some later sections on the Mountain, the road is slightly cambered to the right through the whole series [possibly for drainage], so there is helpful camber in the two rights, but nothing for you in the two lefts!

Quarry Bends to Ramsey Hairpin



Accelerating hard through the last right, a bumpy straight leads to one last fast left **Caley's** onto the equally bumpy **Sulby Straight**. Don't relax your concentration until you line this turn up carefully at full throttle, because with the correct line, using the entire road and a close apex, any car can be driven flat out without lifting through here. **Sulby Straight** is the longest on the Course, so the highest entry speed and maximising your speed all the way along it is worth seconds over someone who is a bit cautious!

Quarry Bends - Flat out from Ballagoyne and through first right hander. Brake slightly and down one for left hander. Accelerate through bends after this and back into top as soon as possible onto Sulby straight.

Sulby Straight technically ends at Sulby Village, where three very slight kinks can still be taken flat out. These do provide a nice signal that a hard braking area is ahead, so as soon as the car straightens after these kinks, start easing on the brakes for the uphill, long curvature, first gear corner at **Sulby Bridge**. Slightly deceptive, this corner requires a long time turning the car up over a crest; i.e. it feels like it's got more than 90 degrees of turn, even though it's not quite that much.

Sulby Bridge - Hold flat out for a second or two after right hander at end of straight. Brake hard down to second gear.

Missing the intruding left hand side wall, accelerate down the gently curving slope towards the **Ginger Hall** pub. Be on the right hand side then brake early for the bumpy entry to the uphill second gear left there. *Just be wary of entering this too fast or applying too much throttle early on exit, for it's easy to lose the rear end here.*

Ginger Hall - Up two gears after Sulby Bridge and back down one.

A rising almost full throttle left then opening right hander next gets you to the crest of a small hill and then you need to brake for a slow second gear left at **Kerrowmoar**. After this you are faced with an almost mirror image sequence, although it's flatter and faster! So accelerate hard again through another large radius right, then brake to the right hand side and get back to second, preparing for a faster pass by the apex of the next left.

Kerrowmoar - Up two more gears from Ginger Hall and back down one. Can be taken quicker than you think.

Exiting this, savour the thrill of the small ramp, then get hard on the throttle through to **Glentramman** approach.

Full throttle now along a very fast stretch comprising a long shallow left then right with a slight crest at it's end, very shallow long left, past the few buildings at **Glen Duff** then a short right hand kink over another small crest. Know the road goes this way and you won't have to lift until you are well past this sequence and sense the road suddenly drop away in front and ease left through two shallow kinks. By the second of these you should be beginning to brake from high speed to a moderate third gear pace and then keep slowing progressively with light brake applications from the start of the next medium radius right, which starts just before the crest of a slight hill then descends increasingly steeply to the slow second gear left at **Glentramman**.

Glentramman - Flat out from Kerrowmoar round two left handers and brake and down two. Brake into right hander and stay in that gear for left hander.

Out of **Glentramman** accelerate hard taking the left fork in the road, along a fast right / shallow left / fast right combination. When you see this start to descend ahead and turn left, brake down to third gear pace then continue at half throttle through the tricky undulating camber changes of a left/shallow right/left combination at **Conker Fields / Churchtown**.

On a bike this sequence is taken at high speed and essentially as one long left, care only being taken to avoid the second jutting apex curb over a slight crest on the left at the **Conker Tree or "K" Tree**. In a wider car it's not quite that simple and calls for a steady moderate pace and accurate steering for all to be well.

After this you can accelerate again along a short straight with kinks but brake lightly before entering the next uphill blind exit right, **Sky Hill**, where sadly, young local rider Dan hit the bank. I have placed a marker where his bike ended up. A medium radius corner this, nevertheless it does call for conservative entry speed and holding a long tight apex, because the exit is downhill.

By now, having spent a long time driving under trees from Bishop's Court, you will be thinking, "let me out of the woods", or "where is that airy open mountain this Course is famous for?"

Fear not, nearly there!

A blast down a short straight leads to **Milntown Cottage**. Brake and change to third gear for the right/opening left combination there and then go to full throttle again along the next straight.

Milntown - Flat out from Glentannan, watch feet at left hand bank, (Sky Hill)
Start into first right hander, throttle back slightly for left hander and down one gear for second right but keep speed well up.

Towards the end of this straight there is a nice moderate hump just before the turn in to the last easy right before **Ramsey**. *Set the car up for this by rolling off the throttle and giving the wheel a little flick right just as you ascend this hump, then allow the car to squash down on it's springs slightly sideways, grip, then track through the right hander easily on a good amount of throttle. A nice feeling sequence of moves to 'nail' correctly!*

Entrance to Ramsey - Back into top, then over jump and flat out round right hander.

From there it's full throttle again along a good length bumpy straight into the outskirts of **Ramsey**, braking down to a slow third gear pace again starting just before the green metal foot bridge, for the left at **Schoolhouse Corner**.

School House - Watch bumps on braking, down ² 2 gears?

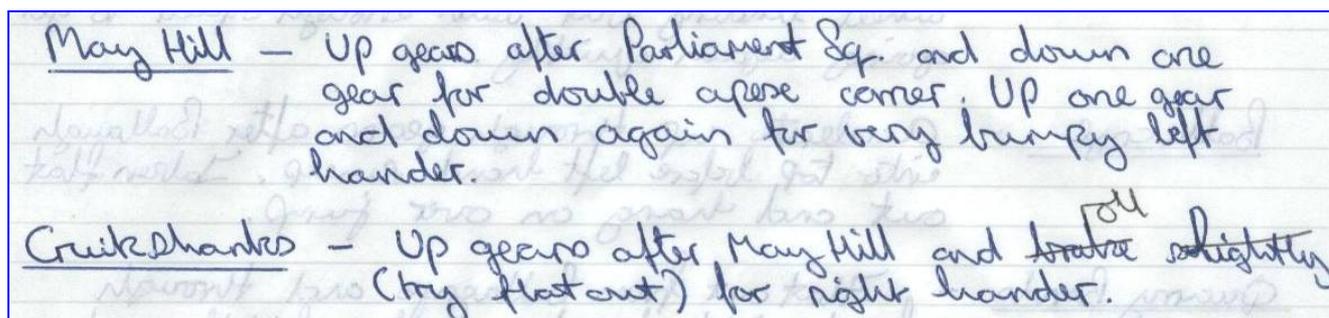
Fast down the next straight; start braking just after the slight kink in the road for the bumpy approach to the first gear, sharp right hander at **Parliament Square, Ramsey**.

Parliament Sq. - Brake after bump in road. Down to first gear.



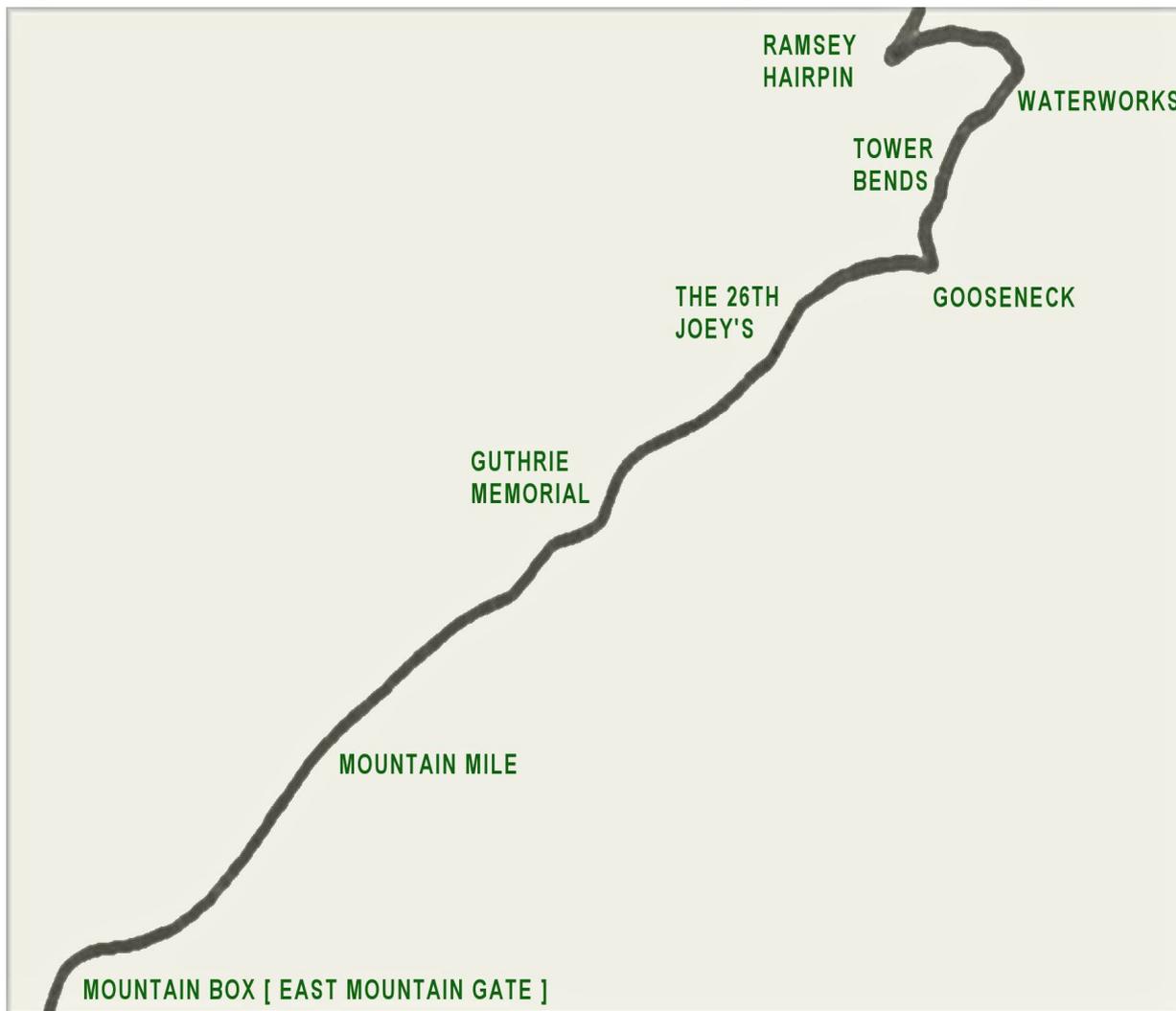
Parliament Square Ramsey

Next accelerate hard past the short left and the Bus Station towards **May Hill**. Back there to third gear and brake for the uphill right **Cruickshank's**, you can increase throttle from about mid corner, as you get your first taste for a long while of the dulling effects of a steep hill on the performance of your car. Cresting **Cruickshank's** corner at **May Hill**, you brake again as the road flattens for the approach to the tight second gear left at **White Gates**, where you take your leave of **Ramsey**.



Increasingly uphill now, you might notice, if you weren't driving, the outline of the Tower on the hill above. Up through the right at **Stella Maris** for which you need to back off a little, accelerate again briefly then get hard on the anchors for the approach to one of the three slowest corners on the Course, the uphill, nearly 150 degrees left turn at **Ramsey Hairpin**.

Ramsey Hairpin To Mountain Box



Ramsey Hairpin - Down to first gear, slip clutch on exit.

Beware of wheel spin accelerating so steeply away from this corner in first gear and then find your way at a brisk pace uphill through an open right and moderate right connected by two straighter sections. The road then swings slightly left then disappears from view round a bank to the right. When you see this clearly, brake hard to a slow second gear pace for the first of two tight right handers at **Waterworks 1**. The second of these **Waterworks 2** follows after a straight of only 70 metres or so and is by far the tighter of the two, with the most curvature [or degrees of turn]. Be prepared for this or you might end up over the bank on the left. First gear is an option for the second corner.

Waterworks - Down one gear for first right hander and down one more for second.

You have already started your journey up the **Mountain**, and your surroundings now demonstrate that. Suddenly emerging from the main tree canopy, the footpath that has been your companion and irritant on either one side or the other since the start of your lap also ends.

You approach the first of the **Tower Bends** now along a short uphill straight. Stone walls close in through this technical, twisty section. The sequence is moderate right then opening left, a short uphill straight, then moderate left/ tighter right/left, opening to a short straight approach to the **Gooseneck**. A tall second gear or low third gear is what you need to thread your way through these uphill bends. Be patient, just learn the sequence and get through cleanly with accurate steering and a smooth throttle. This tight uphill section is not about gaining time, it's all about patience and not losing time!

*Indeed, during the whole of your drive up to the top of the Mountain, still nearly eleven kilometres away at **Hailwood Rise**, you should be thinking about how to maintain momentum through uphill bends, the entry to some of which you have to discipline yourself to slow down for.*

Recovering from mistakes here, back up to proper racing speeds, will be painfully slow!

The **Gooseneck** is a very tight increasingly steep first to second gear corner. Hard to slow down sufficiently to meet the apex, then hard to get your acceleration correct to avoid wheel spin while trying to fight a really steep bit of hill.

Good luck! 😊

Gooseneck - Tricky approach, can be done in first gear without slipping clutch if corner speed kept up.

Accelerating away hard now you can't see far ahead because the roadside walls block your view somewhat. There are several just discernable left hand kinks as the road turns slowly left and levels out just a little. Just when you are getting used to the speed you can negotiate these, you have to remember to back off through one irritatingly tighter left kink, just as you are getting up some head of steam against the steep grade. This leads to a slight left after a short straight then a right hander that you will then have to slow for again at **The 26th [Joey's]**. *This right is tricky because the exit is tighter than you expect!*

Kinks after Gooseneck - Two left handers flat out, right hander throttle back slightly.

A long uphill straighter section can be driven flat out now until you see the road disappear close on the left hand side around a hillside bank. This is the start of the approach kinks to **Guthrie's Memorial**, three little blind exit kinks that should be taken as one left hand sweeper. *So don't try to follow the bank closely to the left after the first apex, just let the car wash off speed against the decreasing incline here on a trailing throttle and guide it slowly left. You will find the second and third apexes come out to meet you naturally* and then you will be lined up nicely for a second or low speed third gear entry between the white stone walls to the uphill right which ends this complex.

This is your first taste of blind, multiple apex corners on the Mountain. Get used to it, as there are another four of them to negotiate!

A steep incline then takes you to a left that you will need to slow down for. Remember your 'slow in fast out mantra' for both this and the next third gear right which follows after a short straight. *This last right is another of those slower corners where exit speed is everything, because after it there are two and a half kilometres of full acceleration uphill* along **The Mountain Mile** towards the distant **Snaefell**.

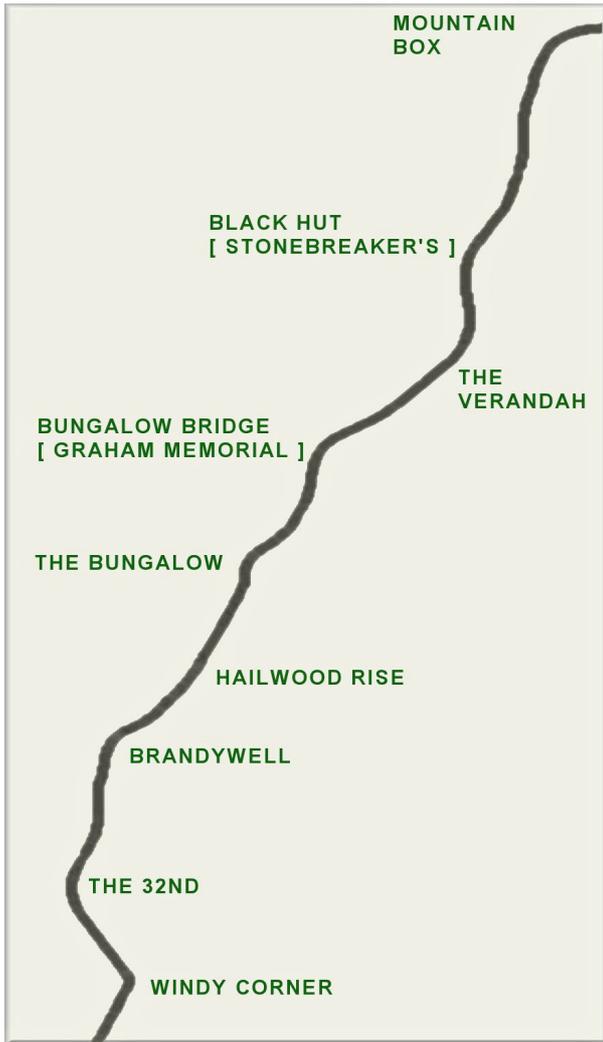
Guthrie's - Flat out through three left handers on approach then brake and down two gears for right hander. Up gears and ~~steer~~ throttle slightly for left hander and then right hander onto Mountain mile.

The Mountain Mile is made up of a number of twists and turns, getting slightly tighter through a walled right hand gap towards it's end. Most of it can be taken at full throttle once you learn the road, with a nice line and a degree of commitment. 180 mph plus should be your goal in a '67 chassis! At the last set of stone walls past a last easy right hand kink, it's time to brake hard for **Mountain Box [East Mountain Gate]**, the next multiple apex left hand bend.



Mountain Mile

Mountain Box to Windy Corner



There are three left hand kinks in **Mountain Box** and one slightly later. Just be prepared for continued moderate third gear pace turning through a long 90 degrees effective left and you will be fine.

Next through an easy shallow right / left S bend you approach the first of two right hand bends with a straight between them. The first of these can be taken at a moderate fourth gear pace, but the second, beside the Mountain Hut, is slower, more a high third gear pace. Be aware that the road has levelled considerably now, so throttle response has returned to normal levels. Another straight leads left through a large radius sweeper under **Snaefell** at **Black Hut [or Stonebreaker's]** *but this curve is slower than it's looks because it's slightly off camber. Take it easy!*

Out of this a slight kink leads you to **The Verandah**. The mountainside you have followed to your left since the **Gooseneck** reappears on your right because you have traversed a high pass. You now find yourself on a ledge at speed facing another four apex sweeper. Positive camber here helps you tuck in to the right, the best line being to just miss the first apex, drift out from the second, edge back closer to the third, tuck back into the fourth then gun it hard!

Verandah - Down one gear for left hander before
two gear for Verandah. Back into top and count the
four corners coming in gradually to apex
the last one.

Flat out then along the next straight and an easy right sweeper, when this ends, get on the brakes for the next left hand sweeper at **Bungalow Bridge [or Graham Memorial]**. Like the Quarry bends all those miles ago, the road is cambered inwards towards the hill from Black Hut, so while this provides help through the right handed **Verandah**, it's effectively negative camber and therefore very "slippy" at **Bungalow Bridge**. You will think your car has suddenly developed a bad case of terminal understeer. Be prepared!

Bungalow Bridge - Down one gear for sweeping left hand bend.

Ascending slightly steeper now, a short straight leads to two third or fourth gear right handers, however you should be on the brakes hard at the end of the second of these, because the road suddenly crowns then drops away into a tight left and through the dip that is **Bungalow**.

Bungalow - Try to keep to left on way in through three right hand bends coming across to right gradually. Brake and down two gears for Bungalow itself.



The Bungalow

From the tramlines here, it's full acceleration again up the bumpy **Hailwood Rise**, the last climb on the Mountain.

As the road starts to turn right, get off the throttle and apply moderate brake, even though it looks too early to do so. There are two reasons for this. The right handed approach to **Brandywell** is easy but tightening, but the left handed exit that you can't see yet is even tighter and slippery. Secondly, although it is commonly held that **Brandywell** is the highest part of the Mountain Course, the climb actually stops back at the start of the right hander at the end of **Hailwood Rise**. Pedantic perhaps, but this does affect the car's reaction to both throttle and brakes!

Brandywell - Flat out up Haikwoods rise. Brake through right hander on way in and down two gears.

So; now aware that the car feels more responsive but harder to pull up, we start the descent with a gradual slope and two easy sweepers. Exiting the second right handed one, brush the brakes and prepare for your next multiple apex test, the three left hand kinks that make up **The 32nd** and lead to **Windy Corner**. *The thing to remember with these third gear bends is that the third kink is about twice as far from the second, as the second is from the first. So meet the first apex, let the car track lazily wide of the second, then bring it back late to match the distance of the third apex. Again, don't try to keep a consistent distance to the banks on the left, for that will be your undoing. A sucker bet!*

32nd milestone - Brake and down one ^{after} first kink, apex second, out and apex third, up to top again and down to Windy corner.

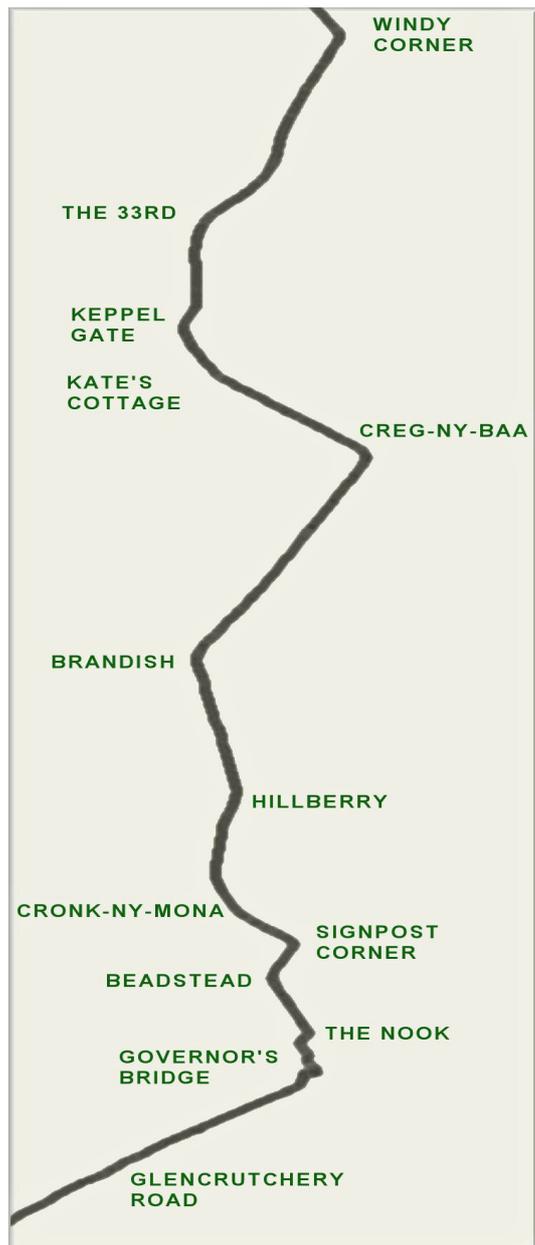
Down the now steeper hill, start braking just past the kink in the road for the second gear **Windy Corner**. Another slow in/fast out proposition for sure, or you will find yourself in almost the only runoff area on the track, which is a sand trap!

Windy corner - Brake after signs, down two gears?



Approaching Windy Corner

Windy Corner To The Grandstand



Full throttle again now, slightly less steeply downhill, you don't have to back off along the next straight or next left. How late you start braking through the next big right hand sweeper is up to you, but curiously, it's faster than it looks. *The key objective though is knocking off enough speed and keeping right for the following double apex blind left hand corner at **The 33rd***, however this is also faster than it looks; at least slow third gear pace. Because it's blind though, I suspect this is one of the corners it will probably take you longest to get the most speed out of. I know I have never managed to go fast enough to come off there yet! 😊

33rd Milestone - Slot through sweeps on approach.
~~Down~~ ~~one~~ gear (try in top). Go into
 first left fairly early and sweep
 through both corners as one.

Now something that is slightly confusing for inexperienced drivers here, what looks like an almost mirror image sequence follows towards **Keppel Gate**, however while you can get hard on the throttle until the start of the right hander you see in the distance, this time you need to get hard on the brakes earlier and to the right hand side entering it, for it is a short corner and is almost immediately followed by a slow second gear turn to the left.

The easy way to remember the difference between the approach to **The 33RD** and approach to the following **Keppel Gate** is simply to note that at **Keppel Gate**, there are hills on both sides of the track, as it goes through a small pass.

While the road levelled a lot through **Keppel Gate** after the next slight left it descends steeply towards the first house you have seen since **Ramsey**, a two storied white one beside a stone wall known as **Kate's Cottage [or simply Kate's]**. *Take care, for the road steepens even more through the third gear left here.*

Keppel Gate - Brake and down one for first right and down two more for left. Up gears and ~~brake~~ straighten and peel in early for Kates (should be flat)

Through that, you notice a wonderful vista opening before you of a long downhill straight, the **Creg-Ny-Baa [The Creg]** pub at the end of it and **Douglas** by the sea far below. You gain speed fast down the steep hill over a slight drop off and on to a bumpy more level braking area in front of **The Creg**. *Leave enough braking time, for the last part of the entry to the right angled right hander here suddenly steepens again.*

Creg-ny-baa - 2nd Gear

A good fast exit from this second gear corner sets you up for one of the fastest parts of the Course, rivalling the **Highlander, Sulby Straight and Mountain Mile** sections for raw speed. Downhill flat chat, you urge your mount on up through the gears in a claustrophobic environment of high grassy banks on both sides. About 150 metres beyond a slight double kink in the road, it's time to drop down some very serious anchors to pull up in time downhill for the fast second gear corner at **Brandish**; a corner, like Windy, that has recently and sadly been emasculated IRL. A matter of opinion granted. 😊

*Slower than it looks **Brandish** and with a downhill exit, take care here, extra care, or you will likely understeer into the right hand bank!*

Brandish - 3rd Gear.

Now we have one more delicious long downhill straight that leads us right off the Mountain. In front is **Hillberry**, but let's forget it while we concentrate on gaining speed. Enjoying this, but **Hillberry** is still there, staring at us, daring us to just try to take it a bit faster than last time and still stay off the bank on the left. A fast corner, whose entry suddenly goes from steeply down hill to uphill just at turn in. The real riders seem either to love or loath the challenge of it, for the machinery always wants to run wide unless you fight it.

Let's just say it's a fast third gear corner that you need to brake for, deal with suspension compression and then hold in to the right hand apex a bit longer than you think, and leave it at that.

Hillberry - Down one gear, try to be smooth and can be taken faster than you think.

On the throttle uphill again, the next curves are the four undulating left hand kinks at **Cronk-Ny-Mona**. Increasingly far apart and decreasing in steepness, these can be taken as one long moderate fourth gear left, but start backing off approaching the fourth kink at the top of the hill and start hard braking as soon as the car straightens up after that, for the entry to **Signpost Corner [Signpost]** is downhill again.

Cronk-ny-Mona - Watch first left which is flat out. Then throttle back slightly and take sweeps as one.

Signpost is a straightforward right angled second gear corner. Another good candidate for the slow in fast out technique as it also drops away slightly.

Signpost - 2nd gear? must - get on throttle

A short straight then leads to **Bedstead**, a slightly faster left, then it's almost level along a longer straight to **The Nook**, another second gear but opening right. Miss this turn right, and you would end up in the Governor's garden!

Bedstead - Up to 3rd and throttle back slightly for left hander. Watch bumps on brakes. Steady down to Governor's.

Through suddenly enclosing trees, accelerate briefly around a shallow left sweeper *then get quickly on the brakes* as you see the road straighten then suddenly steepen again in front. This is the last drop down to **Governor's Dip [or Bridge]**, the tightest turn on the Course and start of the tightest section by far. *Take it really easily, because it would be silly to come off so close to the end of a lap.*

This last little right/left loop is the only part of the course not normally used by through traffic, so is very tight and slippery!

Get into first gear to take the 150 degree downhill right hander, be easy accelerating into the next tight left and then feed on the power gradually all in first gear as you exit back out of the trees through the last easy right onto **Glencrutchery Road** again.

Governors Bridge - very tight first gear, use camber, dip

Decreasingly uphill, you can accelerate away hard now past the last few houses until the Grandstand comes into view on the left.

So, is it to be?

Flat chat across the start / finish line for your next appointment with Bray Hill?

Or some respite in the Pit's?

If the latter, remember to put your foot down in the Stop Box before moving to your Pit stall eh? 😊

Have fun with it guys and gals!

Cheers from way down under.

Jim Pearson
2019.

TRACK LOCATION NAMES - MEANING AND SIGNIFICANCE

ISLE OF MAN MOUNTAIN COURSE

Grandstand

At 85 metres above sea level, the start area for the time trial format TT Races in June and the Manx GP and Historic races in August annually. Starter's office / box on the right has been refurbished and repainted in much darker colours recently.

St Ninians

Intersection with bump, named after St Ninian's Church LHS on entry.

Bray Hill

Curved road down a very steep hill approaching 13% gradient towards the bottom where it suddenly flattens and rises slightly right. Fast but a big compression on suspensions. 170+ MPH by the top Superbike Riders down here.

Ago's Rise

Named after multiple TT winner and record 500cc World Champion Giacomo Agostini, who rode his MV Agusta in a classic contest against Mike Hailwood on his Honda in the 1967 TT. (Also a World Championship 500cc Round)

Quarter Bridge

There is an unseen bridge here over the River Glass. Named after an historic boundary "Quarterlands".

Braddan Bridge

The unseen bridge here spans the River Dhoo

Snugborough

Dip in the road before Union Mills. There is an industrial estate down a side road of that name.

Union Mills

Ancient name was Mullin Doway meaning Mill on the Black Ford. A corn mill used to operate here and still stands.

Ballahutchin

The hill after Union Mills. A local name.

Glenlough

Name of the depression / shallow valley before Ballagarey.

Ballagarey

Name of a local farm.

Glen Vine

Village name.

Crosby Sweeper

Very fast slight switch back sweeper entering the village of Crosby. David Jefferies, a fantastic rider, lost his life here during TT practice week some years ago, hitting one of the poles on the right exit. I have placed a marker there.

Crosby

Village name.

Coach & Horses

A small Coach House / Pub of that name used to exist here close to the location of the current jump.

The Highlander

Former Coach House. The building still stands there on the right before the rise up to the Greeba Castle corners.

Greeba Castle

A large Mansion of this name hides in the trees on a hill behind the telephone box on the right. The name is derived from the old Scandinavian for hill.

Appledene

Just a location name as far as I can tell.

Greeba Bridge

See Greeba Castle. However this seems just a local name for the corner, as there is no river or stream and therefore, no bridge!

The Hawthorn

White painted Pub on the left after Greeba Bridge.

Gorse Lea

Section of road encompassing the two long right handers before Ballacraine.

Balacraine

The Ballacraine Arms was a Pub on the left exit which still stands. In an old film about the TT George Formby misses the turn and I believe ends up in the front Bar.

The Village of St Johns is a few hundred metres away if you go straight through where the straw bales are instead of turning right up to Ballaspur. The original TT races for bikes from 1907 to 1910 started at St Johns, turned left to join the modern TT Mountain Course at Ballaraine, followed it until Douglas Road Corner at Kirk Michael, then turned back south along the coast road to Peel, returning to St Johns to complete a lap.

Bikes weren't powerful enough to tackle the Mountain Course until 1911 and weren't very manoeuvrable. Classes were based on MPG and there was controversy about overuse of pedals to assist this. Average speeds 38 MPH!

Ballaspur

In Manx, Farm of the Spur or Rock Farm.

Ballig

The name of the small hamlet of a few houses on the left of the bridge, which is unseen but you just feel a slight rise and fall in the road here.

Doran's Bend

Named after Bill Doran who developed the bad habit of crashing here twice in 1950 and 1952.

Laurel Bank

Laurel bushes used to grow here.

Black Dubh

Named after the dark boggy area next to the Rhenass River that flows along the right hand side of Glen Helen as you drive north.

Glen Helen

The whole valley is Glen Helen, however only the final few corners of the Mountain Course here are usually referred to by this name.

Sarah's Cottage

Named after the occupant who lived there during the formative years of the TT in the early 1900's.

Greg Willy's

Named after a local whose given name was Willey. Creg means "Hill" so we effectively get "Willey's Hill" .

Lambfell Beg

Name of the farm on Creg Willy's Hill.

Cronk-Y-Voddy

Translated from the Manx as "Dog Hill". This was the location of the last school teaching Manx Gaelic.

Jefferies

Recently officially named Molyneux's after record holding Sidecar TT winner Dave. Great racer and worthy of such honour, however I had personally named this corner in honour of David Jefferies many years ago, as it symbolised his beefy frame and big heart. This is a man sized corner...a ballsy corner, so I wont change my mind.

The 11th Drinkwaters

The first of several corners taking their principle name as the distance in miles from the start line. 11 miles from the start, with an older name referring to Ben Drinkwater, an amateur rider who was killed here competing in 1949.

Handley's

Named after Wal Handley, a TT winner, who crashed here in the 1932 Senior TT on his Rudge and had to retire from the race. Famous for its high walls and the yellow drain cover that just happens to be on the perfect exit line from this natural chicane.

McGuinness's

Recently named in honour of multiple TT winner John McGuinness, this is the last corner in a sequence that exits into the open straighter section heading to Top Of Barregarrow.

Top Of Barragarrow

Refers both to the small settlement at the crossroads near the church and to the hill on which it stands. Hence "Top" and later "Bottom". The Manx is "Bayr Garroo" meaning rough road. Local signs vary the spelling from Barragarrow to Barragaroo.

Just to confuse the issue further, pronunciation is usually expressed to sound like "B'garra." or "B'garrow".

Bottom of Barregarrow

The drop off camber, sharp, short, high compression turn past the white house at the bottom of this very steep hill.

The 13th

13 Miles from the start, the actual position is towards the bottom of this hill. The last left is sometimes referred to as Westwood.

Douglas Road Corner

Cooildarry in Manx, or Oak Nook. Intersection on the Peel to Kirk Michael coast road. The original TT "St Johns Course" used to turn left here south towards Peel, then back inland to St Johns and Ballacraine.

Kirk Michael

Town name on the course.

Rhencullen

Name means "Holly Ridge". A series of four bends; slight left / moderate radius downhill right / opening left / cresting slight right, the second of which is named Birkin's Bend, situated after exiting Kirk Michael. The last of these over a crest provides exhilarating "air" if you are fast enough and know the road turns slightly right beyond the crest.

Birkin's Bend

The second of the four Rhencullen bends, this tricky downhill right hander was named after Archie Birkin. He was killed in practice here for the 1927 TT trying to avoid a fish van. Up till then practice sessions were not conducted on closed roads. From 1928 they were.

Lyndhurst

A local name for the small settlement beside the road after the decent from Rhencullen.

Bishop's Court

Previously known as Ballacurry, in Manx "Farm Of McCurry". Refers to the mansion here that used to be the residence of the Church of England Bishop of Sodor and Man.

Alpine Cottage

Alpine House is the white house to the left just past the Bus Shelter. This is situated between the 16th and 17th Milestones of the Course and is a distinctive reference point due to the uniquely shaped cypress tree beside the road here.

Ballaugh Bridge

The bridge and village take this name. A sharp rise and drop off over a switch back section of road, requiring a slow speed that still tends to bring your stomach up to your mouth.

Gwen's

Gwen Crellin, MBE. The last White house on the right after the road straightens leaving Ballaugh. You will see her looking over the fence here and also the plaque that was placed on her wall celebrating her contributions to road racing.

She is no longer with us, but acted as a Course Marshall and provided much hospitality, cups of tea, cakes etc to the mysteriously large numbers of riders who just happened to experience temporary mechanical failures exiting Ballaugh during practice sessions.

Ballacrye

In Manx, "McCray's" or "Cry's Farm". A short undulation in the road after a fast sweeping bend that can lead to the fastest bikes becoming completely airborne.

Quarry Bends

The Manx is "Close-e-volley". Name derives from the nearby stone quarry at Ballavolley.

Caley's

The fast entrance corner to Sulby Straight. Named in honour of the longstanding proprietor of the general store on the right at Sulby Crossroads. A founding member of the Manx Grand Prix Supporters Club who was renowned for his fundraising efforts in support of track safety.

Sulby Straight, Sulby Crossroads, Sulby Villiage, Sulby Bridge.

Features of this almost straight mile long section. The crossroads appear early, containing the Pub on the left, General Store and Church on the right. [The right turn here takes you on a very tight but scenic road right up to the Bungalow, nearly the highest point of the Course and a great spectator area].

The Village of Sulby towards the end is nestled around the slight curve in the road there and finally, the "Bridge" is over the unseen Sulby River at the sharp turn right towards Ginger Hall.

Ginger Hall

Named after the Pub, which in turn was named after the famous Ginger Beer that used to be served there. Has been repainted in recent years. Used to be rather orange, now off white.

Kerrowmoar

The sharp left after the top of the hill beyond Ginger Hall.

Glen Duff

Name of the location where there is a small group of buildings at an intersection before the drop down into Glentramman.

Glentramman

Generally, the whole area after Glen Duff is Glentramman as this forms a drop into a shallow valley, but for racing the name usually refers to the last descent into the final second gear left hander, immediately before the fork in the road.

Conker Fields / Churchtown

There is a church tucked away in the trees on the right and a War Memorial.

Sky Hill

The right then left turns before Milntown Cottage. Refers to the name of the hill on the right. This is where Dan Neave, a very promising local rider had his accident in practice for the 2018 TT. I have placed a marker there.

Milntown Cottage

Name of the white cottage at the entrance to this next right / Left combination.

Schoolhouse Corner

A fast left at the local school.

Parliament Square Ramsey

Ramsey is the seat of government of the Isle Of Man, which is the oldest Parliament and representative democracy in the world!

It makes its own laws including tax and road rules; which is why many parts of the non built up areas have roads with technically no speed limits. They issue currency in pounds sterling, [which is not accepted by everyone when you carry some back to the UK, but is exchangeable at Banks.]

The Queen is their Monarch, but the Island is simply a Crown Dependency and as such is not part of the United Kingdom. It is not governed by the UK Parliament, although UK foreign policy does tend to apply.

Britain is often referred to locally simply as "The Mainland"

Cruickshanks Corner / May Hill

Deemster Cruickshank used to own the land here and allowed his gate to be opened so the TT could proceed.

White Gates

The left before Stella Maris and Ramsey Hairpin. There used to be two prominent white gates at this corner.

Stella Maris

The name of a large private house above this bend.

Ramsey Hairpin

Named for obvious reasons; one of the three tightest corners on the Mountain Course, the others being The Goosneck coming up soon, and Governor's Dip at the end of the Course.

Waterworks

Waterworks are over the bank on the left at these two slow corners, sometimes referred to as Waterworks 1 and 2. The first is a slow second gear corner and the next, some 70 metres further, is tighter and has more curvature.

Tower Bends

Named after the "Albert Tower" on the Hill to the right, which was built to commemorate the visit to Ramsey of Queen Victoria and Prince Albert in 1847.

The Gooseneck

Named for the shape the road presents when looked at from above.

The 26th (Joey's)

Refers to the corner just past the 26th milestone, the tightening right hander before the long climb towards Guthrie's Memorial.

Commemorates the life and career of the greatest Road Racer in TT history, Northern Ireland's Joey Dunlop, a "Ballymoney Man", who still holds a record 26 wins. So it is fitting he is remembered at "The 26th".

He lost his life riding, but not here where I believe he never came off, but during a 125cc race on a circuit in Estonia in 2000, while trying to support the local road racing riders.

Often a man who let his riding do the talking and who loved to tinker with his bikes, he was modest, generous with his time and supremely skilled. His exploits were legendary; for example, apparently running into curbed edges in certain spots to get added leverage turning the bike at high speed.

His funeral procession closed roads for miles and was a sight to see. A man much revered and beloved to this day, dare I say in some ways, beyond anything I have witnessed in relation to other Motor Sport icons like Manuel Fangio or Jimmy Clark.

Guthrie's Memorial

Named for Jimmy Guthrie, six times a TT winner, killed in the 1937 German GP. The Memorial here on the right is in the spot where he retired in his last TT.

Mountain Mile

Actually, nearly one and a half miles of not quite straight road towards Snaefell.

Mountain Box (East Mountain Gate or East Snaefell Gate)

Named after the gate that was used to keep sheep contained during the first TT races. First rider through had to stop to open it!

Black Hut (Stonebreaker's)

A hut on the Right at the left hander before The Verandah. Also known as Shepherd's Hut.

The Verandah

Also known as "Four Bends" this set of apexes resembles a shelf or Verandah, considering the big drop off to the left.

Where local Ramsey rider Connor Cummins had his massive "off" some years ago at over 100 mph, he and his bike bouncing down the hill and over a stone wall, after a back end loose. He is back racing, thankfully.

Bungalow Bridge (Graham Memorial)

There is a big stone culvert bridge here unseen from the road but just visible in TV1 Cams. Named after that bridge but also Les Graham, killed at Bray Hill in 1953.

The memorial here also mentions Richard Swallow, a five times Manx GP winner and so the corner was sometimes referred to as "Swallow's Sweep".

A difficult corner with a negative / adverse camber.

The Bungalow

Named for a Swiss Chalet style railway hotel that once stood here, since demolished. The crossing point for the Laxey to Snaefell Summit Tramway.

Hailwood Rise

Named for Mike "The Bike" Hailwood, winner of 14 TT's who moved to car racing including Formula 1. After 11 years away from most bike racing, he returned to the TT in 1978 and against all predictions, won the Formula 1 TT riding a Ducati,.

Brandywell

Top of Hailwood Rise and Brandywell are at the highest point on the Mountain Course assessed at between 425 - 428 metres. Has also been known as "Colonial Corner" because of the large numbers of riders from former British Colonies who have come off here.

When the roads are open and unrestricted during TT fortnight, quite a few amateur riders trying out the Course will come off here as they misjudge the amount of braking required for this tight left hand turn, after "opening the taps" right up from the Bungalow.

The 32nd

The 32 mile since the Grandstand. A tricky triple apex left with varying opinions about how to handle it. Miss the second one and concentrate on the other two is my tip!

Windy Corner

A gap in the hills [Mullagh Ouyr and Slieau Meayl], means there always seems to be wind here, which the riders have to adjust to while rounding this bend. Hence the name.

The 33rd

Otherwise unnamed double apex left 33 miles from the Grandstand, leading on to Keppel Gate.

Keppel Gate

There used to be a set of highway gates here but the name's origins are obscure.

Kates' Cottage

Used to be known as "Tait's Cottage" after the family that owned it, however this was apparently incorrectly referred to as Kate's instead of Tait's in a BBC broadcast before the second world war and that name entered popular usage.

Creg-Ny-Baa

After the famous Pub that stands here. In Manx this means "Rock of the Crow".

Brandish

Walter Brandish broke his leg here in 1923.

Hillberry

In Manx its Cronk-Y-Berry. "Cronk" means Rock or Hill. "Berry" refers to a local Manx witch.

Cronk-Ny-Mona

Means "Hill of Turf" This is where riders are recorded as passing, as a light then comes on in the Pits, to allow Teams to prepare for refuelling stops.

Signpost Corner

Apparently there used to be a prominent signpost here pointing towards Douglas, when the roads and junction were much less developed.

Much of the Course, especially the Mountain section was just a rough dirt track in the early years.

Beadstead

The farmer here used an old wrought iron bead head as a gate.

The Nook

Means "A corner or recess"

Governors Dip (or Bridge)

The tight left hander in this essentially private bit of road. The Governor's Residence is behind the trees between The Nook and the 150 degree right hander entering "The Dip".

Glencrutchery Road

The main coast road above Douglas connecting the North, Ramsey, Laxey and Oncan to Castletown in the south.

Forms the main pit straight past the Grandstand.

Jim Pearson

2019

APPENDIX A

COPYRIGHT and POTENTIAL FOR FUTURE USE BEYOND GPL

All rights reserved!..... Jim Pearson 2005 - 2019.

I hope you enjoy my work, but please don't exploit or abuse that privilege.

I write the following only because there has been a constant stream of comment and argument throughout the construction period of this track, about possible conversions to other simulations. I shouldn't have to address this subject at all if people all behave as they should, having respect for intellectual property and normal courtesy, but some would like to ignore those issues.

So please read carefully! I'm not interested in debating the matter or dealing with repeated questions on this subject after release.

This software, i.e. this 37¾ mile Isle Of Man Mountain Course, and it's component parts, including the track file, track 3DO, individual object 3DO's, textures, object positioning, hand drawn track routing, elevations, bumps and cambers, as drafted; were made by me from scratch using my own source material and are subject to my copyright!

These components were made using 5000 odd of my own original photographs taken during a walking survey of all of the course except the Mountain section, my own in car videos, then long and painstaking analysis of all this material, adjusting for video distortions / fields of view / compass readings / corner sight lines / radius and curvature estimates etc. I then matched all this to my on site observations during several visit's to the Isle of Man between 2005 and 2018.

This is was a painstaking, hand made process. It will not match precisely, any laser scan or other commercial data obtained in future, but it will be close enough. In my opinion, very close.

None of my work was taken or "borrowed" from any other simulation software or track.

No other person or group was involved in the construction of this track.

Anyone else could have put in the amount of work I have to produce their own fully detailed and properly finished Isle of Man track for any simulation. To date, no one else has, apart from one commercial studio for a bike sim using a large staff and significant resources.

As a consequence, my decision to release this track for use by the GPL Community in the simulation Grand Prix Legends (GPL) should NOT be regarded as a free licence for any person, company or group to regard this work as freeware, in full or in any part, no matter how minor that part might be.

There are multiple aspects of the design of this track that are tailored to the specific display properties of GPL, to maximise some of the distinct advantages of that simulation in rendering long complicated tracks with large footprints, over 700,000 polygons and 50,000 trackside objects representing 3500 distinct types. The fine variation and control able to be exercised over draw distances front and rear, three types of manually applied shading / shadows, plus the use of multiple, varying, and overlapping rotating 3DO's (SRB files) has resulted in a natural, complex environment that still achieves consistently good frame rates.

Were this track to be made for, or converted to another simulation, which all use different construction and rendering methodologies, the abovementioned advantages and some of the bump mapping would most likely be lost in part at least with the results compromised, unless very careful alternative build solutions could be found. The number of polygons and trackside objects would probably need to be reduced drastically to get the track to run properly.

Due to this fundamental difficulty, I am NOT interested in seeing half baked, lazy, quick or inexperienced conversions of this track that look and drive poorly, for in my view that just debases my original work.

I will not discount granting permission, at some future date, for persons with proven talent who ask permission to undertake a quality *non income generating and non profit* conversion of this track to another simulation. However, as it has taken me 14 years and over 10,000 hours to construct, *it is my expectation that anyone who has an interest in this track should do me the basic courtesy of driving and experiencing it in the simulation I designed it for, for a while, before they express any interest in using my work elsewhere. It is also only reasonable to expect that no one else takes credit for this work, should it have a life outside GPL!*

It's not hard to install GPL. If you don't have it go here

<http://srmz.net/index.php?showtopic=10001>

<http://www.gplworld...tallation-guide>

<http://www.gplworld...tallation-guide> (this is the German one)

<http://gem.grandprixlegends.info/downloads.html>

An updated version of GPL and its car sets, doesn't take long to install if you follow the guides. GPL is not difficult to drive for anyone with reasonable car control. There are lower powered Mods that are more forgiving than the 1967 F1 cars, for those who don't have that skill, so there is no real excuse for not trying it. Don't believe any detractors who say it's too old a sim to be worth your attention. It may be old, but it's still a real, now significantly updated sim!

My view is that all you are ever doing in any simulation is look from a cockpit over a steering wheel at a track or road in front through to a 3D graphical environment. In that regard, all simulations are remarkably similar, because you don't see the car you are in whilst driving it. Except in GPL, you do see the front suspension and the way that works gives added insight into the track elevations and surface, a decided advantage over a closed cockpit!..

The 3D environment? Well the quality of that while driving is largely dependent on the artistry of a track maker, not the sim it's in. Modern shaders in other sims are fine if utilised sensitively and expertly, but they do take rendering power and can look dark, contrasting and unrealistic if not used with great skill.

I will consider any future request for permission to convert to another simulation, through private message at SRMZ in my own good time and will compare requests with the merit's of any similar competing requests. I will not respond positively, if at all, to any request that does not address and accept the following initial conditions.

- *I expect the real names, not nick names of anyone involved to be used in any communications with me.*
- *Past simulation output / experience / expertise of any participants to be outlined.*
- *A commitment not to sell or ask for donations for the intended conversion, either directly or indirectly.*
- *A convincing argument that the original commercial owner of the sim in question will not benefit commercially in any significant way, or if so, prospects for auditable donations to a charity of my choice [World Vision or Medicine San Frontiers] of a percentage of such benefit.*
- *Acknowledgement that any conversion / output is still subject to my copyright and there is no right to further conversion to other simulations without my written permission.*

- *Agreement to refrain from using odious comparative / competitive / elitist statements associated with conversion works such as "bringing it up to modern standards" or "improvement" [given the reality that this track will probably need to be simplified or "dumbed down" like the Targa Florio conversions from GPL were, to run well in newer simulations that are designed primarily for short tracks.]*
- *My name clearly identified as sole track creator regardless of any changes made, with conversion credit's added separately.*
- *My Original 2 X Readme's for GPL included in any new work.*
- *All beta work made available to me progressively.*
- *I am consulted before any release.*

Should I be approached in an appropriate way and be persuaded to give permission for any conversion, you might find that I would be very co-operative and may well be able to provide considerable assistance with any such project.

HOWEVER, if anyone decides to just take this work and do whatever they like with it, be warned that I am prepared to pursue my rights; at any time of my choosing!

Even though it is a tedious and odious process, I have had downloads containing unauthorised versions of my previous work taken down before and obtained agreement from ISP's and download hosts to review and discipline websites for copyright breaches.

I am quite prepared to do that again.

Jim Pearson..... 2019