

## Manual

### Intro

While Gear Ratio Calculator has undergone many hours of testing, bug finding and fixing over the course of its development, there may be still be some minor bugs left. If you find any please let me know so I can remove them.

#### Known bugs/issues:

- Using “Speeds → Ratios” with AutoRevs enabled can lead to unsatisfactory results as the gears can easily end up being spaced very bizarrely. For this reason I only recommend using “Speed → Ratios” if AutoRevs is disabled. Since the slider bars are so easy to use anyway there should be little inconvenience from using “Ratios → Speeds”.
- Having your regional settings (in Control Panel) set to something other than English (United Kingdom) can cause the program to function with limited functionality and cause crashing. Only some languages are affected.

#### Tips:

- For fine adjustment of gear ratios or tyre pressures, click on the slider then use the PgUp/PgDn keys for large adjustment, the arrow keys for medium sized adjustments or the scroll wheel for small adjustments.

Do check for updates at [www.thefloatingwidget.net](http://www.thefloatingwidget.net), as more features are (still) planned.

Also if you have any improvements or suggestions for GRC, let me know and I'll see what I can do.


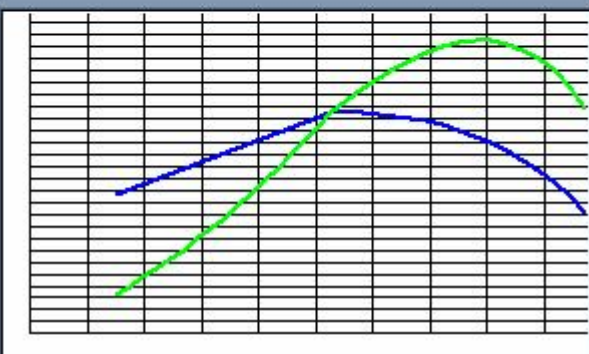
My contact email address is displayed in the program.

## Main Screen

First, select the car you wish to work with from the drop down list box in the top right hand corner:

Select your car:  
FZ50 GTR

## Info Tab

| Body   | Engine & Drivetrain  |               |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
|--|--|---------------|-------|------|---------------|---------|---------|-------------|-------|-------|---------------|-----|-----|--------------|---------|---------|-----------------|---------------|---------------|--------|--------|--------|------------|----------|--|
| Mass: 1207 kg<br>Weight: 11837 N<br>Weight Distribution: 37.9% Front / 62.1% Rear<br>Power to weight: 412 hp/ton<br>Torque to weight: 312 lb ft/ton  | Power: 489 hp @ 8106 rpm<br>Torque: 371 lbf ft @ 5269 rpm<br>Drivetrain: Rear Wheel Drive<br>No. of Gears: 6<br>Efficiency: 87%  |               |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
|    |   |               |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| <b>About LFS Gear Ratio Calculator</b><br>LFS Gear Ratio Calculator v2.5.2 by Bob Smith<br>Compiled with Microsoft Visual Basic 6.0<br><br>Made to try and take the guesswork out of gearing<br><br>Make sure you have the latest version by checking at < <a href="http://www.thefloatingwidget.tk">www.thefloatingwidget.tk</a> ><br><br>If you have any comments (improvements, praise, etc) please send me an email at < <a href="mailto:bobsmith@mrnl.net">bobsmith@mrnl.net</a> ><br><br>Many thanks to The_Angry_Angel for initial beta testing and feedback, Messiah for helping me fix a region bug and MadmanCZ for the cool gear knob in the logo | <b>Wheels &amp; Tyres</b> <table border="1"><thead><tr><th></th><th>Front</th><th>Rear</th></tr></thead><tbody><tr><td>Rim diameter:</td><td>45.7 cm</td><td>45.7 cm</td></tr><tr><td>Tyre width:</td><td>30 cm</td><td>37 cm</td></tr><tr><td>Tyre profile:</td><td>35%</td><td>30%</td></tr><tr><td>Tyre height:</td><td>66.7 cm</td><td>67.9 cm</td></tr><tr><td>Pressure range:</td><td>10.3-30.9 psi</td><td>11.7-35.2 psi</td></tr><tr><td>Track:</td><td>156 cm</td><td>161 cm</td></tr><tr><td>Wheelbase:</td><td colspan="2">237.3 cm</td></tr></tbody></table> |               | Front | Rear | Rim diameter: | 45.7 cm | 45.7 cm | Tyre width: | 30 cm | 37 cm | Tyre profile: | 35% | 30% | Tyre height: | 66.7 cm | 67.9 cm | Pressure range: | 10.3-30.9 psi | 11.7-35.2 psi | Track: | 156 cm | 161 cm | Wheelbase: | 237.3 cm |  |
|  | Front  | Rear          |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Rim diameter:  | 45.7 cm  | 45.7 cm       |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Tyre width:  | 30 cm  | 37 cm         |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Tyre profile:  | 35%  | 30%           |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Tyre height:   | 66.7 cm  | 67.9 cm       |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Pressure range:  | 10.3-30.9 psi  | 11.7-35.2 psi |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Track:   | 156 cm   | 161 cm        |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |
| Wheelbase:   | 237.3 cm   |               |       |      |               |         |         |             |       |       |               |     |     |              |         |         |                 |               |               |        |        |        |            |          |  |

Not much to do here, just all the facts and figures used by GRC. If you are a tech head you may find some of this interesting.

The torque and power curves will turn red if GRC could not estimate them properly, otherwise the torque curve is the blue line and the power curve is the green line.

The estimated top speed is a theoretical value and does not take gearing or downforce into account.

The pictures of the cars can be changed, however they must be JPG files, with dimensions of 319w x 174h (if they are to be displayed correctly). The picture is chosen by matching the filename to the car name in GRC. This means you can use your own skins in the program (by taking a screenshot from either the game or the CMX viewer), or of custom cars made with LFS Tweak.

## Gearing Tab

☒ Ratios ==> Speeds    ☐ Speeds ==> Ratios

Tyre Type: Slick R2    Available Graphs/Data: Speed/Torque vs RPM

Calculate Speeds from Gear Ratios

Final Drive: 3.666

| Gear    | Ratio              | Speed     | Engine Speed...<br>After | Before   | Torque at<br>Wheels |
|---------|--------------------|-----------|--------------------------|----------|---------------------|
| 1st     | <span>3.45</span>  | 58.6 mph  |                          | 9629 rpm | 4081 lbf ft         |
| 2nd     | <span>2.333</span> | 83.7 mph  | 6511 rpm                 | 9317 rpm | 2760 lbf ft         |
| 3rd     | <span>1.7</span>   | 110.2 mph | 6789 rpm                 | 8971 rpm | 2011 lbf ft         |
| 4th     | <span>1.35</span>  | 135.3 mph | 7124 rpm                 | 8783 rpm | 1597 lbf ft         |
| 5th     | <span>1.125</span> | 157.1 mph | 7319 rpm                 | 8537 rpm | 1331 lbf ft         |
| 6th     | <span>1</span>     | 167.4 mph | 7589 rpm                 | 8106 rpm | 1183 lbf ft         |
| Reverse | 3.7                | 46.2 mph  |                          | 8106 rpm | 4377 lbf ft         |

Acceleration

0-30 mph: 1.5s  
 0-60 mph: 3.15s  
 0-100 mph: 6.45s  
 0-125 mph: 10.1s  
 0-150 mph: 16.6s  
 170.8 mph v-max  
 Quarter mile ET:  
 10.9s @ 130.2 mph  
 Mile ET:  
 28.6s @ 166.1 mph

The heart and soul of GRC – this is where the important stuff takes place.

You can choose to either input gear ratios (and have the speed that ratio will reach calculated) or input the speed you want to reach (and have the gear ratio you need calculated). Since you never need to type values in anyway (there are slider inputs available) I would recommend sticking with the Ratios → Speeds option.

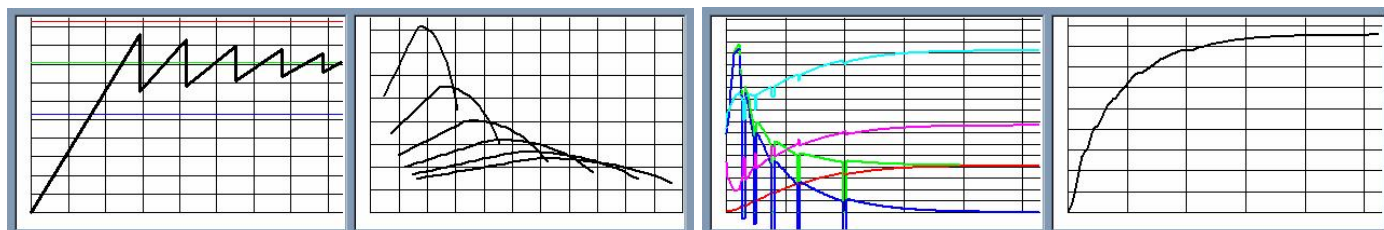
The choice of tyre affects the amount of grip available and acceleration times. You can also pick what graphs or data to view (explained on the next page).

You can use either the sliders or text entry to input gear ratios/speeds. The engine speed at the point of change is displayed, along with what it will drop to as soon as you have changed. The torque at the wheels is always shown.

Text colouring:

- Ratios → Speeds only: if the speed for a particular gear exceeds the top speed of the vehicle, it will turn red.
- Speeds → Ratios only: if the gear ratio falls outside the range accepted by LFS (0.5 to 7.5), it will turn red.
- If the engine speed before the shift exceeds the redline of the engine, it will turn red.
- If the engine speed after the shift falls below the rpm of maximum torque, it will turn blue.

GRC also performs acceleration testing, and shows estimated acceleration times, either to fixed speeds or fixed distances. The maximum attainable speed with the current gearing is also shown (though you might not be able to reach this speed on track if there isn't a straight of suitable length).



To help visualise the affects of changing the gear ratios, four graphs are drawn.

Of the first two, the graph on the left hand side shows the speed of the car on the x axis and the engine speed on the y axis. A line for each gear is shown, and is available to be displayed into two different formats. It is also

possible to turn on lines for the rpm at which the torque peaks (the blue line), the rpm at which the power peaks (the green line), and the rpm considered to be the redline of the engine (the red line).

The graph on the right hand side shows the torque available throughout the rpm range of each gear on the y axis, and the wheel speed (in rpm) on the x axis. It is possible to turn on the un-multiplied torque of the engine on this graph, and it will show up as a thicker blue line.

The second two graphs are based on all the acceleration data, and as such are not available if acceleration testing has been disabled.

The left hand graph is a tractive effort plot, and shows up to five forces (with the force on the y axis and time on the x axis):

- The red line is the resistance force
- The dark blue line is the driving force
- The green line is the accelerative force
- The purple line is the combined vertical force on the front tyres (*optional*)
- The light blue line is the combined vertical force on the rear tyres (*optional*)

The right hand graph is a simple speed vs. time graph, with time on the x axis and speed on the y axis.

| Time | Speed    | Engine RPM | Gear | Driving Force | Resistance | Net Force | Acceleration | F/R Vert. Wheel Loads |
|------|----------|------------|------|---------------|------------|-----------|--------------|-----------------------|
| 0s   | 0.6 mph  | 3750 rpm   | 1    | 7062 N        | 118 N      | 6944 N    | 0.59 gn      | 4486 N 7351 N         |
| 0.1s | 2 mph    | 3750 rpm   | 1    | 7496 N        | 119 N      | 7377 N    | 0.62 gn      | 3127 N 8710 N         |
| 0.2s | 3.4 mph  | 3750 rpm   | 1    | 7929 N        | 119 N      | 7810 N    | 0.66 gn      | 3047 N 8792 N         |
| 0.3s | 4.9 mph  | 3750 rpm   | 1    | 8388 N        | 121 N      | 8268 N    | 0.7 gn       | 2964 N 8878 N         |
| 0.4s | 6.5 mph  | 3750 rpm   | 1    | 8875 N        | 122 N      | 8753 N    | 0.74 gn      | 2876 N 8971 N         |
| 0.5s | 8.2 mph  | 3750 rpm   | 1    | 9391 N        | 125 N      | 9266 N    | 0.78 gn      | 2784 N 9071 N         |
| 0.6s | 10 mph   | 3750 rpm   | 1    | 9938 N        | 129 N      | 9809 N    | 0.83 gn      | 2687 N 9178 N         |
| 0.7s | 11.9 mph | 3750 rpm   | 1    | 10517 N       | 133 N      | 10384 N   | 0.88 gn      | 2585 N 9293 N         |
| 0.8s | 13.9 mph | 3750 rpm   | 1    | 11132 N       | 139 N      | 10993 N   | 0.93 gn      | 2478 N 9416 N         |
| 0.9s | 16 mph   | 3750 rpm   | 1    | 11783 N       | 146 N      | 11637 N   | 0.98 gn      | 2366 N 9548 N         |
| 1s   | 18.3 mph | 3750 rpm   | 1    | 12474 N       | 155 N      | 12319 N   | 1.04 gn      | 2247 N 9690 N         |
| 1.1s | 20.7 mph | 3750 rpm   | 1    | 13206 N       | 166 N      | 13041 N   | 1.1 gn       | 2124 N 9843 N         |
| 1.2s | 23.2 mph | 3750 rpm   | 1    | 13983 N       | 178 N      | 13805 N   | 1.17 gn      | 1994 N 10008 N        |
| 1.3s | 25.8 mph | 4047 rpm   | 1    | 14191 N       | 193 N      | 13998 N   | 1.18 gn      | 1906 N 10137 N        |

The last option is to display the acceleration data table, which shows 9 columns of information (not counting time) on the vehicle performing a standing start to terminal velocity.

## Tyres Tab

Car Speed:

89.5 mph

☐ Blow Tyres

Slick R2

☐ Analyse Front Tyre
 ☒ Analyse Rear Tyre

Front tyre pressure:

21 psi

Rear tyre pressure:

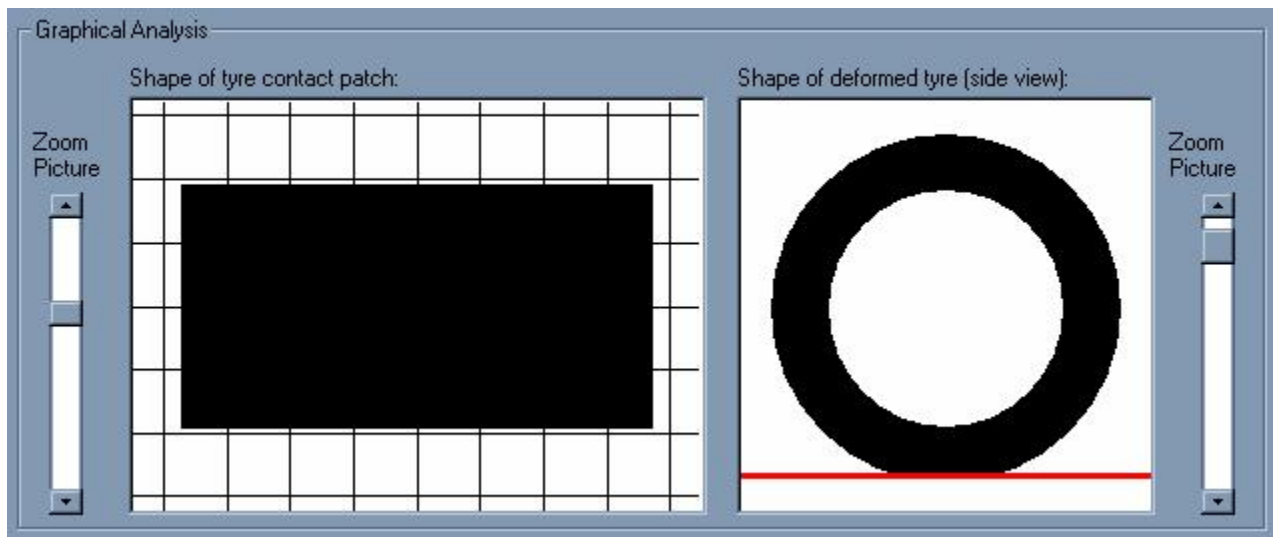
24.5 psi

Here you can alter the tyre pressures of the front and rear tyres and view lots of deformation information. GRC does not currently support asymmetric (left/right) tyre pressure configurations. Use the two sliders to input the tyre pressures. Bear in mind that altering the tyre pressure for the driven wheels will subtly affect your gearing settings.

You can also see how the tyre would deform were the tyres to go flat.

For cars with downforce, the car speed slider is available. Here you can watch the tyre deformation as you alter the speed.





Using the tyre choice buttons, you can switch between viewing information for the front or rear tyres. The left hand diagram shows the shape of the contact patch of the tyre. This is a very simplified view as in reality the patch has rounded edges, and unless slick tyres are used, the grooves in the thread would not be in contact with the road. The right hand diagram shows the vertical deformation of the tyre, however unless very low pressure are used this is a very small affect, so it's best to zoom the picture in a bit with the zoom picture slider.

|   |   |
|---|---|
| Numerical Analysis                      |   |
| Contact patch width: 37 cm              | Tyre stiffness: 522.5 kN/m                            |
| Contact patch length: 19 cm             | Tyre frequency: 5.94 Hz                               |
| Contact patch area: 0.07 m <sup>2</sup> | Unloaded tyre radius: 33.9 cm                         |
| Contact patch aspect ratio: 1.94 : 1    | Tyre deformation: 1.4 cm                              |
| Front/rear contact patch ratio: 0.629   | Tyre rolling radius/circumference: 32.6 cm / 204.8 cm |
| Coefficient of Grip (Mu): 1.4           | Tyre wall height remaining: 9.7 cm                    |

Also, all the statistics used to draw the diagrams and shown below them. Perhaps most interesting is the Front/Rear contact patch ratio. When this reads 1.0, the contact patches of the front and rear tyres are of equal area. Numbers greater than one indicate that the contact patch is larger at the front, while numbers less than one indicate that the contact patch is larger at the rear. As a rule of thumb, the larger the contact patch, the more longitudinal grip a tyre has. Lateral grip also tends to increase with the area of the contact patch, however low pressures also increase the sideways deformation of the tyre and can upset the handling of the vehicle.

## Aerodynamics Tab

The 'Aerodynamics Tab' window features a horizontal slider for 'Car Speed' currently set at 89.5 mph. Below the slider is a 'Speed Selection' section with two radio buttons: 'Slider Speed' (which is selected) and 'Top Speed'.

Here you can choose at what speed to view the aerodynamic information. You can either select your own speed (by using the slider), or use the estimated top speed of the vehicle.

|                   |            |
|-------------------|------------|
| Front Wing Angle: | 7 degrees  |
| Rear Wing Angle:  | 16 degrees |

For cars with downforce, you can input the wing angles you are using in your setup.

|   |  |  |
|---|--|--|
| <b>Totals</b><br>Drag: 951 N      Rolling Resistance: 200 N<br>Lift: -2749 N      Resistance Split: 83% / 17%<br>Lift/Drag Ratio: 2.89 : 1      Friction: 1151 N              |  | <b>Misc Info</b><br><b>Top Speed: 171.8 mph</b><br>Air Temperature: 20°C<br>Air Density: 1.204 kg/m <sup>3</sup>                                   |
| <b>Body Info</b><br>Cd: 0.2767      Air Drag: 480 N<br>Cl: 0      Lift: 0 N<br>Frontal Area: 1.8 m <sup>2</sup> Lift/Drag Ratio: 0 : 1<br>CdA: 0.5      Weight Multiple: 1.23 |  | <b>Force Distribution Info</b><br>Front Wheels: 5538 N<br>Rear Wheels: 9048 N<br>Force Distribution: 38% / 62%<br>Aero Distribution: 38.3% / 61.7% |

There are two sets of aerodynamic information viewable; the first set is available for all cars. On display are the aerodynamic properties of the body of the car, the distribution of these aerodynamic forces and the resistances generated, all at the speed previously selected by the user.

|   |   |  |
|---|---|--|
| <b>Undertray Info</b><br>CdA: 0.27<br>ClA: -1.6<br>Drag: 256 N<br>Lift: -1536 N<br>Lift/Drag Ratio: 6 : 1 | <b>Front Wing Info</b><br>CdA: 0.05<br>ClA: -0.35<br>Drag: 49 N<br>Lift: -337 N<br>Lift/Drag Ratio: 6.9 : 1 | <b>Rear Wing Info</b><br>CdA: 0.17<br>ClA: -0.91<br>Drag: 166 N<br>Lift: -875 N<br>Lift/Drag Ratio: 5.27 : 1 |
|---|---|--|

For cars with downforce, you can also view the separate information for the undertray and wings, again all at the speed previously selected by the user.

## Loading/Saving settings

Accessible from the file menu, you can output all your settings (tyre pressures, gear ratios, speeds and the chosen car) to a text file. These files can then be opened later on to save you having to type your settings in again.

If a file is currently open, the path and filename is shown in the title bar.

## Options Panel

|                            |                           |                |
|----------------------------|---------------------------|----------------|
| Units of Speed:            | Miles per Hour            | mph            |
| Units of Distance:         | Centimeters               | cm             |
| Units of Area:             | Square Meters             | m <sup>2</sup> |
| Units of Pressure:         | Pounds per Square Inch    | psi            |
| Units of Mass:             | Kilograms                 | kg             |
| Units of Force:            | Newtons                   | N              |
| Units of Stiffness:        | Sthenes per Meter         | kN/m           |
| Units of Acceleration:     | Rate of free fall         | gn             |
| Units of Power:            | Horsepower (Original)     | hp             |
| Units of Torque:           | Pound-force Feet          | lbf ft         |
| Units of Power-to-weight:  | Horsepower per Ton (Long) | hp/ton (UK)    |
| Units of Torque-to-weight: | Pound Feet per Ton (Long) | lb ft/ton (UK) |

|   |   |
|---|---|
| Speed Plot Options  |   |
| Horizontal Scale: <input type="text"/> mph                              | Vertical Scale: <input type="text"/> rpm                  |
| <input checked="" type="checkbox"/> Show Peak Power Line                | <input checked="" type="checkbox"/> Show Peak Torque Line |
| <input checked="" type="checkbox"/> Show Rev Limiter Line               | <input checked="" type="checkbox"/> Alternate Graph Style |
| Torque Plot Options   |   |
| Horizontal Scale: <input type="text"/> rpm                              | Vertical Scale: <input type="text"/> torque               |
| <input type="checkbox"/> Show Engine Torque                             |   |
| Tractive Effort Plot Options  |   |
| Horizontal Scale: <input type="text"/> Time                             | Vertical Scale: <input type="text"/> Force                |
| <input checked="" type="checkbox"/> Show Front/Rear Vertical Tyre Loads |   |
| Speed vs. Time Graph Options  |   |
| Horizontal Scale: <input type="text"/> Time                             | Vertical Scale: <input type="text"/> Speed                |

|  |                               |
|--|-------------------------------|
| Top / Reverse Gear Max Revs  | Rev Limiter                   |
| <input checked="" type="radio"/> Peak power                                  | <input type="radio"/> Redline |
| <input type="checkbox"/> Enable Rev Limiter                                  |                               |
| Rev Calculation  |                               |
| <input checked="" type="radio"/> Automatic                                   |                               |
| <input type="radio"/> Custom Fixed: <input type="text"/> 7000                |                               |
| Performance Options  |                               |
| <input checked="" type="checkbox"/> Enable Acceleration Calculations (slow!) |                               |

Accessible either from the Tools menu or by pressing Ctrl-O, the Options Panel allows you to configure many settings to your personal preference.

The units tab allows you to select the units you want all the information displayed in, to help make the numbers meaningful. All the commonly used units are available, along with some others I threw just for the hell of it.

The graphs tab allows you to alter the axis scales for all the graphs in the gearing tab of GRC, and also enables you to choose addition lines to be drawn.

The miscellaneous tab allows you to change the way in which various parts of GRC work.

- Top/Reverse Gear Max Revs: while the engine speed to change up at is calculated automatically, for top gear (and reverse), there is no optimum. This lets you switch between the redline of the engine (best for tracks where the car doesn't reach top speed), or the peak power of the engine (best for tracks where it does, e.g. the oval).
- Rev Limiter: this limits the revs to the redline of the engine.
- Rev Calculation: by default GRC calculates the optimum shift point between gears (i.e. when the red light appears on the dashboard) and uses this point to calculate speeds and torque. If you prefer, you can over-ride this behaviour with your own rpm values (the same for all gears, except top and reverse, which are described above).
- Performance Options: here you can disable the acceleration testing as this is very CPU intensive and can make GRC sluggish to respond. If you are having problems you can disable this and GRC should respond in a timelier manner (at the cost of reduced functionality). Of course you can always turn it on again later.

The current options can be saved by pressing the "Save Options" button, and retrieved again by pressing the "Load Options" button. This is to save you having to configure things the way you want them every time you load the program. Once saved, the options load automatically when the program is started.

## Language Selection

|                                     |                              |
|-------------------------------------|------------------------------|
| Language Selection                  |                              |
| Current language:                   | English                      |
| Select your language:               | <input type="text"/> English |
| Author:                             | Bob Smith                    |
| <input type="button"/> Save & Close |                              |

Accessible from the Tools menu, the Language Selection box quite simply allows you to select the language you would like to view GRC in.

If your language is not listed, then you can always make a translation (should you have the time and inclination). Contact me if this is the case.

*MRNL Bob Smith*

## Custom Presets

The image shows two side-by-side forms for creating and editing custom car presets. The left form is titled 'Add a new custom preset' and the right is 'Edit existing custom preset'. Both forms have a 'Tweak Name' field at the top. Below it is a 'Based on Car' dropdown menu. The forms then list various vehicle specifications with input fields and units: Peak Power (kW), Engine Speed at Peak Power (rpm), Peak Torque (Nm), Engine Speed at Peak Torque (rpm), Engine Speed at Idle (rpm), Drivetrain (dropdown), Number of Gears (dropdown), Vehicle Mass (kg), Unsprung Mass (kg), Weight Distribution (% (front)), Cd, Front Wheel/Tyre Size, Front Track (m), Rear Wheel/Tyre Size, Rear Track (m), and Wheelbase (m). At the bottom of each form are buttons for 'Load from file', 'Add Car', 'Save to file', and 'Update'. A status bar at the bottom left of the left form indicates 'Custom Presets used: 0 / 10'.

While GRC contains information about all of the cars in LFS, it is possible to modify the cars with LFS Tweak, so what if you want to setup the gearing for cars you have created yourself?

This is where the custom presets panel comes in (accessible from the Tools menu or by pressing Ctrl-U), here you can enter information about your tweaked vehicle, and then GRC will then be able to accurately calculate gearing for it.

Unfortunately GRC needs a lot of information in order to work with custom cars, hopefully if you're familiar with LFS Tweak you'll know how to get this information.

*NB: Unsprung Mass, Front Track and Rear Track aren't currently used by the program; this is why you cannot enter values in these boxes.*

To add a custom preset, first fill out all of the fields in the "add a new custom preset" form, then press "Add Car" – the information will then be checked for validity, and if ok, the car will be added to the car list.

You can go back and edit the car's details if you change your tweak by selecting it from the list of custom cars at the top of the "edit existing custom preset" form. From here you can view all the details of the car with the possibility to change them. Press "Update" to update the car's details. Cars cannot be removed from the car list, however the list is always empty when the program is first loaded. Up to 10 custom cars can be added at a time.

Custom presets can be saved to a file as well to save you from having to re-enter all the details. Once the preset has been added, simply select it from the edit form list and click the "Save to file" button, name it and press Save.

To open existing custom presets, press the "Load from file" button, select the file and press Open. This should then fill in all the fields in the "add new custom preset form". Just press "Add Car" and it should be added into the car list.

The image shows a 'Quick Unit Converter' dialog box. It has a title bar 'Quick Unit Converter' and a subtitle 'Quickly convert units...'. There are two main sections. The first section is 'Convert Units' and contains four rows of input fields: 'Distance' (with a dropdown set to 'm'), 'Mass' (with a dropdown set to 'kg'), 'Power' (with a dropdown set to 'kW'), and 'Torque' (with a dropdown set to 'Nm'). Each row has a label, an input field, a dropdown menu, and a unit label. The second section is 'Convert Metric Tyre Sizes' and contains three input fields: '205', '585', and 'R 380'. Below these fields is the converted result '205 / 50 R15'. There is a 'Close' button at the bottom right.

If you are making a real life car in LFS, it is possible that the data you have for the car may be in different units than what LFS requires.

To solve this, I have made a quick unit converter that allows you to enter a value, pick the source units, and it will be converted to SI units (used by both LFS and GRC).

It also converts metric tyre sizes to the standard UK format.

I hope you find this little utility of some use.