Explorer Technical Reports- Check Sheet.

You have worked hard on your ROV build project over many months. Had some fun, maybe an odd tear, but in general, had some fun and made a great team entry.

Tell us about it!!

Please don't skimp on telling the judges about the great work you have done. Otherwise you risk giving **easy** points away. The following guide is based around MATE judges' observations for simple improvements over recent years- and hopefully will provide some help to avoid dropping easy points.

All so often ....the report is missing the perfect story- but judges see "between the lines" is evidence of a fantastic piece of work and great technical results.

Here are some hopefully helpful tips to be used as a guide. Have fun!

No	Item	Check Guide
1.	Basic	Have you used the allocation of 25 pages? Many excellent reports could be even better by using the full allowable space to tell the judges even more about your great work.
2.	Basic-**English** Language	If your team's first language is NOT English - **don't worry**-we want your participation and you are a valued competitor. A good idea is to consider a check read by a person **fluent** in English. Arrange with them early, so to get the best result. Don't let this person re-write but merely make suggestions and advise where corrections are needed. Even better if that person is not a mentor or connected with your MATE entry- ....*then they will provide an independent input.*
3.	Basic-Pages and numbering	Are pages numbered?

No	Item	Check Guide
4.	Diagrams and photographs	• Are the diagrams or pictures legible? • Are diagrams referenced and used in the report- or just put in the report to take up space? Judges can spot this very easily. A report making use of and supplemented by diagrams is much easier to follow.
5.	Photograph of your ROV (complete)	Is this a clear picture somewhere in the report? ie not squeezed into a corner somewhere. (Front page is acceptable).
	SAFETY	

6.	**Safety**- <u>The most important aspect of your project</u>
	Your report should reflect this.
		Please do not add this as "just another ticked box".
		Safety IS the most important aspect of your project.
		The report should reflect this all the way through- that you are thinking and working safely- for example:,
		• PPE when working with tools
		• Safety of your design
		• Safety of the team and the environment
		• Fuses
		• **Pre dive check list**. (this can go into the addendum). Favourites are:
		  ✓ describe any pre dive tests and checks with the system.
		  ✓ Power and safety systems all functional.
		  ✓ Safety equipment in place.
		  ✓ Personal protective equipment, glasses, life jacket etc.
		  ✓ Non team bystanders all standing clear.
		• etc
		
		The key SAFETY drivers for the team are:
		1) No harm to yourselves as team members (or onlookers)
		2) No harm to your equipment
		3) No damage to the environment that the MATE mission is based around.

No	Item	Check Guide
7.	Abstract	This needs to be "catchy" as it will give the judge an <u>early</u> impression of the general content of the report.
8.	Planning and Project Management	***You should have developed a plan of where you wanted (and needed) to be - and by when in your MATE project development.*** Don't forget to mention use of a planning tool such as a bar chart. A few lines about how the team planned and apportioned the project elements amongst the team.
	Challenges, lessons learned etc.	
9.	*Technical* challenges and *Personal* challenges	Easily mixed up -but they <u>are ==different==</u>. Give both of these some thought for example: What was a key challenge to the design -or the build - or the test (something that really caused delays and maybe even some frustration)? How did you overcome it /them? What was personal challenge (for a few team members)? Conflicts with study time, learning new skills and tools are good examples.
10.	Given more time what would you do differently next time?	Discuss this among the team. A thoughtful statement here gets points!

No	Item	Check Guide
	Budgets and Costs	
11.	Budget- **Get it right!**	This is what you are starting out with as an estimate of what you have allocated to put aside for your project. **Not** your final costs. It is always a good idea to put a blank sum in for unforeseen costs or **contingency** -stuff you had not expected;- for example a change in your design incurring more cost Re using old parts is acceptable, especially if they are of significant cost- it simply doesn't make any sense to buy them again. Allocate a value for them in your budget (which will come through in your final costs).
12.	Costs	As you work through your project and getting towards the end, you will be approaching the **actual** costs. Great if it is close to the original budget (eg travel costs to the MATE finals) but often there are differences and judges will normally not penalise this if reported correctly.

No	Item	Check Guide
	Other	
13.	Efforts in community service (**OutReach**)	Excellent effort that you have found the time to contribute here! But do not use valuable space here in your Technical Report other than a brief mention. Reporting this is covered in the competition elsewhere
14.	Interface Diagrams	Most teams get this right!
15.	Photo of the Team	Is this included? Names?
16.	Acknowledgments	Some basics here: • Your learning institution that have helped by providing this opportunity. • Mentors. • Any support or donations. • The MATE Centre (don't omit this one!!)
17.	References	Don't need a long list • Your internet sources, • Periodicals and magazine sources, The MATE ROV handbook (**Underwater Robotics**) is also an excellent reference and shows the judges that your are well researched in your efforts. *Note: This is quite expensive, but easy to read and well worth the investment -- maybe your learning institute library can obtain a copy*