LaTeX template for Meerkat Telescope Operator Manual

Goals:

- To prepare the manual for printing.
- To create a platform that can handle professional and high quality document as required in scientific reporting.

Advantages of Latex over Word:

- Handles large documents and Graphics
- Text quaity and layout far better that word.
- Complex Mathamatical equations and scientific features
- Better referencing.
- Version control possible

Disadvatages:

- LaTeX is typesetting/programming language, needs time to learn.
- Commands must be typed in.
- Errors due incompatable packages.

Getting Started with Latex

- Install LaTeX compiler (MiTex for Windows, MacTex for Mac, TexLive for linux/Unix)

- Install Latex Tex editor (TexMaker, TexStudio, etc)

- Or **Overleaf** for cloud typesetting.

Elements of the Manual that were typeset

- All figures (more than 130) must be:
    - referenced
    - captioned
    - size scaled
    - clear - not blury (latex has some tools to improve the quality of images.)

An example of bad image is shown in

Figure 1: Linus add vpn dialog box

Figure 2: Good image

- Bulleted lists and common errors:
  - consistant bulleted lists across the documnent
  - add inroductory sentence to bulleted list.
  - harmony between inroductory sentence and list
  - Semi-colon or not?
- Naming convections and typographycal styles:
  - SI units
  - Consistant font styles for code, Names of files, servers, software, links, etc. for example,

```
ssh kat@obs.mkat.karoo.kat.ac.za
ipython
import katuilib
configure_cam("camcam","all")
```

- Common technical errors:
  - incorrect use of punctuation, (i.e :, (), −)
  - missing punctuation
  - Language - UK vs US?