1. **INTRODUCTION**

Paragraph 1: General information about energy applications, creep, superalloys, microstructure.

Paragraph 2: More in depth information. …….Due to this lack of knowledge, these are the implications….. In order to do “blank”, the role and mechanism of creep in these superalloys must be better understood.

Paragraph 3: This thesis focuses on the process…..This superalloy was chosen because…. These heat treatments and temperatures and tensions were chosen because…. The following measurements were done in conjunction with scanning electron microscopy to better understand the relationship between grain size…..The overarching goals of this thesis are to:

1. Characterize some stuff
2. Understand some stuff
3. Do more
4. Do more
5. **BACKGROUND**
   1. **Metals** 
      1. *Small Specific Metal Thing*

Paragraph 1

Paragraph 2

* + 1. *Another Thing*

Paragraph 1

Paragraph 2

* + 1. *And Yet Another*

Paragraph 1

Paragraph 2

* 1. **Stress**

Paragraph 1

Paragraph 2

* 1. **High temperature stuff**

Paragraph 1

Paragraph 2

* 1. **Superalloys**

Paragraph 1

Paragraph 2

* 1. **Microstructure of austenitic steels**

Paragraph 1

Paragraph 2

* 1. **Creep** 
     1. *Subsection*

Paragraph 1

Paragraph 2

* + 1. *Subsection 2*

Paragraph 1

Paragraph 2

* + 1. *Subsection 3*

Paragraph 1

Paragraph 2

* 1. **Creep machines**

Paragraph 1

Paragraph 2

1. **METHODS**
   1. **Creep Testing**
      1. *Creep Testing*

Creep measurements were made using the methods developed by Garofalo, 1962, and used for example in…./ Using a custom apparatus that had been verified…. Before measurements were taken the creep testing machine was calibrated using…. Samples until the measured stress and strain was within the bounds of literature values. This many measurements were done at these parameters.Abc

* + 1. *Calibration of Creep Machine*

Calibration was done on the built creep machine through ….

Abc

* + 1. *Subsection 3*
  1. **Scanning Electron Microscopy**
     1. *Subsection*

Abc

Abc

* + 1. *Subsection 2*

Abc

Abc

* + 1. *Subsection 3*

* 1. **Strain-Rate Jump Testing**

Abc

Abc

1. **RESULTS**
   1. **Scanning Electron Microscopy**
      1. *Subsection*

Abc

Abc

* + 1. *Subsection 2*

Abc

Abc

* + 1. *Subsection 3*
  1. **Creep Testing**
     1. *Subsection*

Abc

Abc

* + 1. *Subsection 2*

Abc

Abc

* 1. **Microstructure**
     1. *Subsection*

Abc

Abc

* + 1. *Subsection 2*

Abc

Abc

* 1. **Strain-Rate Jump Testing**

Abc

Abc

1. **DISCUSSION**
   1. **Impact** 
      1. *Subsection*

Abc

Abc

* + 1. *Subsection 2*

Abc

Abc

* + 1. *Subsection 3*
  1. **Impact 2**

Abc

Abc

* 1. **Impact 3**

Abc

Abc

1. **CONCLUSION**

Paragraph 1

Paragraph 2

Paragraph 3

1. **FUTURE WORK**

Future work should be divided into two main focus areas:

1. Abc
2. Abc
3. **REFERENCES**