

CONSTRUCTION OF BIG ROCKETS

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I. OVERVIEW

- A. What is a "Big Rocket"?
- B. Differences between big and small rockets
- C. Building the rocket to suit the intended flight parameters
- D. Additional subjects the flier will have to be familiar with
- E. Closing: Questions & Answers

II. DEFINITION OF A BIG ROCKET

- A. What exactly is a "big rocket"?
- B. High Power vs. "big rocket"
- C. Crowd feedback – what do you consider a "big rocket"?

III. DIFFERENCES BETWEEN BIG AND SMALLER ROCKET

- A. Types of airframe materials: paper, phenolic, flexible, Carbon fiber, fiberglass, etc.
- B. Fin materials, shapes, and configurations
- C. Shock cord materials & parachutes
- D. Eye bolts, U-bolts, and other connectors

IV. BUILDING THE BIG ROCKET

- A. To fiberglass or not to fiberglass....?
- B. Types of glue / adhesives / bonding agents.
- C. Additional building styles that gain strength.
- D. CG vs. CP – nose cone weight, length of rocket, etc.

V. ADDITIONAL AREAS OF EXPERTISE

- A. Altimeters & timers
- B. Dual deployment, drogue-to-main, multiple parachutes
- C. Hybrids
- D. Miscellaneous: motor retention, et al.

VI. CLOSING: FINAL COMMENTS / Q & A