

## Benjis Hardwired Logic...

...is a set of four tools to predefine staging actions in your rocket.

Fairings can automatically be jettisoned at a given altitude.

RCS and Decoupler can be activated at a set time after launch or prior to reaching Apogee.

- Engines can ignite at a set time after launch or prior to reaching Apogee. An engine can also be cut when a set Apogee is reached. An Apogee Kick Motor can either Burn-Out, Circularize or Cut-Off at a set Apogee.

On-Screen appearing messages for all events can be turned on / off (in VAB and Flight).

A picture says more than a thousand words.

Just check out these awesome flowcharts and the example on the last page.

### Fairing Separator

**Altitude [km]**

0 ... 200

**Jettison**  
Payload  
Interstage

### Delayed RCS

**Delay Mode**

Post Launch

Pre Apogee

**Delay [sec]**

0 ... 59.9

**Delay [min]**

0 ... 30

## Delayed Igniter

### Delay Mode

Post Launch

Pre Apside

**Cut @Apogee**  
Yes / No

**Apogee [km]**  
70 ... 450.000

**Delay [sec]**  
0 ... 59.9  
**Delay [min]**  
0 ... 30

**Engine**

1<sup>st</sup> Stage  
2<sup>nd</sup> Stage  
3<sup>rd</sup> Stage  
4<sup>th</sup> Stage  
Booster  
Separation-Motor  
Spin-Motor  
Ullage-Motor

Apogee Kick Stage

**Kick Stage Mode**

Burn-Out  
Circularize

Cut-Off

**Apaside [km]**  
70 ... 450.000

## Delayed Decoupler

### Delay Mode

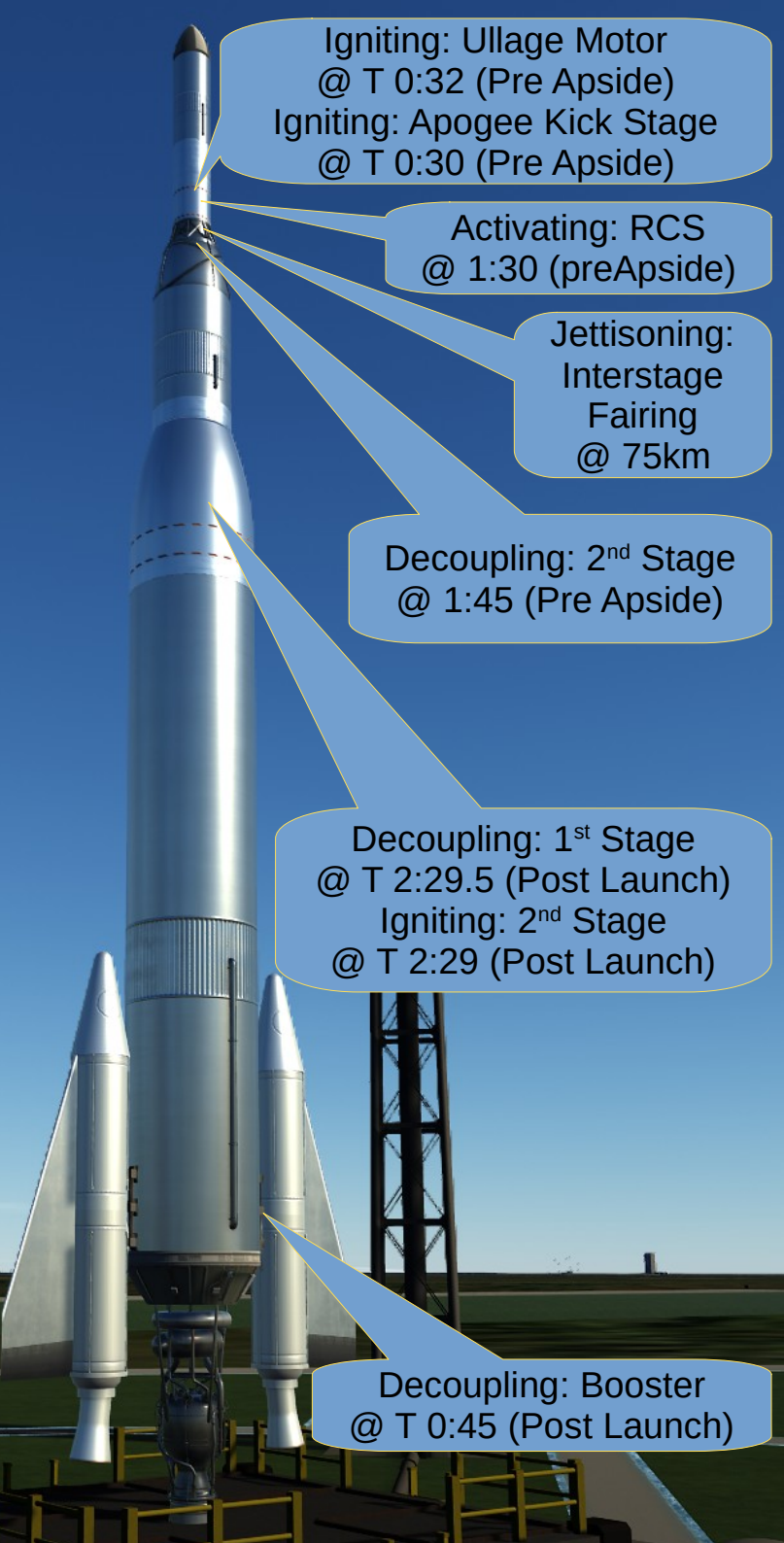
Post Launch

Pre Apside

**Delay [sec]**  
0 ... 59.9  
**Delay [min]**  
0 ... 30

**Decouple**

1<sup>st</sup> Stage  
2<sup>nd</sup> Stage  
3<sup>rd</sup> Stage  
4<sup>th</sup> Stage  
Booster  
Spin-Motor  
Ullage-Motor  
Apogee Kick Stage  
Payload



#### 4) (2<sup>nd</sup> Stage Burn)



#### 3) Decoupling: 1<sup>st</sup> Stage Igniting: 2<sup>nd</sup> Stage



#### 2) (1<sup>st</sup> Stage Burn) Jettisoning: Interstage Fairing



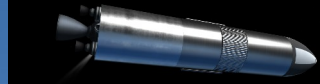
#### 1) Decoupling: Booster



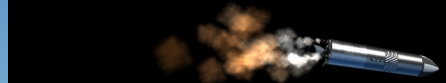
#### 5) Decoupling: 2<sup>nd</sup> Stage (Coasting)



#### 6) Activating: RCS



#### 7) Igniting: Ullage-Motor



#### 8) Igniting: Apogee Kick Stage

