

CONTROL Flight Programming Worksheet

Description Extreme Rush Booster

Date 8/28/06 By Dave Flynn

".msc" Filename XRushBooster.nctr

Self Test Checks

- | | |
|---|--|
| <input checked="" type="checkbox"/> Show Version | <input checked="" type="checkbox"/> Confirm AUX continuity |
| <input checked="" type="checkbox"/> Check Battery | <input checked="" type="checkbox"/> Confirm FLOOR continuity |
| <input checked="" type="checkbox"/> Check Altimeter | <input checked="" type="checkbox"/> Confirm PEAK continuity |
| <input checked="" type="checkbox"/> Check Accelerometer | <input checked="" type="checkbox"/> Confirm AIR continuity |
| <input type="checkbox"/> Confirm AUX open | <input checked="" type="checkbox"/> Blink Peak |

Flight Parameters

Acceleration threshold	2.5g	Minimum battery voltage	8.8	V
Pressure ceiling	299ft	AIRSTART delay	1	s
Pressure floor	2000ft	PEAK delay	0	s
Landing threshold	3ft/s	FLOOR delay	0	s
FALLING! threshold	165ft/s	AUXILIARY delay	0	s

Trigger Sequencing

- | | | | |
|--|-----|----------------------|--------------------------------|
| <input checked="" type="checkbox"/> Fire airstart | 1 s | from event timer # 1 | <input type="checkbox"/> latch |
| <input checked="" type="checkbox"/> Fire peak | 0 s | from event timer # 3 | <input type="checkbox"/> latch |
| <input checked="" type="checkbox"/> Fire Floor | 0 s | from event timer # 5 | <input type="checkbox"/> latch |
| <input checked="" type="checkbox"/> Fire auxiliary | 0 s | from event timer # 1 | <input type="checkbox"/> latch |

State Descriptions

State 0	LAUNCH DETECT
State 1	Burnout Detect, Booster Dropper, Stage Sep.
State 2	Acceleration Apogee
State 3	Pressure Apogee, Primary Deployment Charge
State 4	Drogue Deployment Delay
State 5	Backup Deployment Charge
State 6	Unused
State 7	Unused

		0	1	2	3	4	5	6	7
ACC > threshold		✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ACC < zero		<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VEL > high limit		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>
VEL < low limit		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VEL < zero		<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALT > ceiling		✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALT < apogee		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALT < floor		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	✓	<input type="checkbox"/>	<input type="checkbox"/>
AUX channel open		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AUX channel closed		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeout		0	0	0	0	4	0	5	0
LED	15	●	○	○	○	○	○	○	○
	14	○	●	●	○	○	○	○	○
	13	○	○	○	○	○	○	○	○
	12	○	●	●	○	○	○	○	○
	11	●	○	○	○	○	○	●	○
	10	○	○	○	○	○	●	●	○
	9	○	○	○	○	○	●	●	○
	8	○	○	○	○	○	●	●	○
	7	●	○	○	○	○	○	●	○
	6	○	○	●	○	●	●	●	○
	5	○	○	○	○	●	●	●	○
	4	○	○	●	○	●	●	●	○
	3	●	○	○	○	○	○	●	○
	2	○	○	○	●	●	●	●	○
	1	○	○	○	●	●	●	●	○
	0	○	○	○	●	●	●	●	○