

ID	Policy Description	Testable?	Remarks
A.RTL1	If the current altitude is less than RTL_ALT, then altitude must be increased until the altitude is greater or equal to the RTL_ALT.	Yes	
A.RTL2	If the current altitude is greater or equal to RTL_ALT, current flight mode is RTL, and the current vehicle is not at home position, then the vehicle must move to the home position while maintaining the current altitude.	Yes	
A.RTL3	If current altitude is greater or equal to RTL_ALT and current position is the same as home position, then flight mode must be LAND.	Yes	
A.RTL4	If current flight mode is LAND and the vehicle touches the ground, then the vehicle must disarm motors	Yes	
A.FLIP1	If and only if roll is less than 45 degree, throttle is greater or equal to 1,500, altitude is more than 10 meters, and the current flight mode is one of ACRO and ALT_HOLD, then the flight mode can be changed to FLIP.	No	Unable to test FLIP Mode with our implementation
A.FLIP2	If the current flight mode is FLIP and roll is between -90 and 45 degree, then rolling right at 400 degree per second.	No	Unable to test FLIP Mode with our implementation
A.FLIP3	After the vehicle finishes A.FLIP2, the vehicle must recover the original attitude (i.e., roll, pitch, and yaw) within k seconds.	No	Unable to test FLIP Mode with our implementation
A.FLIPGeneral	The vehicle should complete the rolling (A.FLIP2) within 2.5 seconds and must return to the original flight mode	No	Unable to test FLIP Mode with our
A.ALT_HOLD1	If the altitude source is the barometer, the vehicle must follow the altitude computed by this source, rather than the GPS	Yes	
A.ALT_HOLD2	If the throttle stick is in the middle (i.e., 1,500) the vehicle must maintain the current altitude.	Yes	
A.CIRCLE1	Pitch stick up must reduce the radius until it reaches zero.	No	Unable to test CIRCLE with our
A.CIRCLE2	Pitch stick down must increase the radius.	No	Unable to test CIRCLE with our
A.CIRCLE3	Roll stick right (think clockwise) must increase the speed while moving clockwise.	No	Unable to test CIRCLE with our
A.CIRCLE4	Roll stick right (think clockwise) must decrease the speed while moving counterclockwise.	No	Unable to test CIRCLE with our
A.CIRCLE5	Roll stick left (think counterclockwise) must increase the speed while moving counterclockwise	No	Unable to test CIRCLE with our
A.CIRCLE6	Roll stick left (think counterclockwise) must decrease the speed while moving clockwise	No	Unable to test CIRCLE with our
A.CIRCLE7	The users do not have any control over the roll, pitch, and yaw but can change the altitude with the throttle stick.	No	Unable to test CIRCLE with our implementation
A.LAND1	Above 10 meters the vehicle must descend at the rate specified in the LAND_SPEED_HIGH parameter.	Yes	

A.LAND2	Below 10 meters the vehicle must descend at the rate specified in the LAND_SPEED parameter.	Yes	
A.AUTO1	The pilot's roll, pitch and throttle inputs must be ignored but the yaw can be overridden with the yaw stick.	Yes	
A.BRAKE1	When the vehicle is in BRAKE mode, it must stop within k seconds.	Yes	
A.DRIFT1	If the vehicle loses GPS signals in flight while in DRIFT mode, the vehicle must either LAND or enter ALT_HOLD mode based on FS_EKF_ACTION parameter.	No	DRIFT Mode was not possible with our implementation
A.LOITER1	The vehicle must maintain a constant location, heading, and altitude.	Yes	
A.GUIDED1	If there is no more way point, the vehicle must stay at the same location, heading, and altitude.	No	Our missions required vehicle to return after
A.SPORT1	In SPORT mode, the vehicle must climb as indicated by the PILOT_SPEED_UP parameter.	No	SPORT Mode was not possible with our implementation
A.RC.FS1	If and only if the vehicle is armed in ACRO mode and the throttle input is less than the minimum (FS_THR_VALUE parameter), the vehicle must immediately disarm.	No	ACRO Mode was not possible with our implementation
A.RC.FS2	If the throttle input is less than FS_THR_VALUE parameter, it must change the current mode to the RC fail-safe mode.	No	Fail-safe mode was not testable with our implementation
A.CHUTE1	Deploying a parachute requires following conditions: (1) the motors must be armed, (2) the vehicle must not be in the FLIP or ACRO flight modes, (3) the barometer must show that the vehicle is not climbing, and (4) the vehicle's current altitude must be above the CHUTE_ALT_MIN parameter value.	No	CHUTE was not testable with our implementation
A.GPS.FS1	When the number of detected GPS satellites is less than four, the vehicle must trigger the GPS fail-safe mode.	No	GPS was not testable with our
A.GPS.FS2	When the GPS fail-safe mode is triggered and there is a secondary altitude sensor, the vehicle must change the current primary altitude source to the secondary sensor.	No	GPS was not testable with our implementation