

This document was intended to track all unit test cases carried out on our

Incomplete Test	A test which isn't implemented correctly
Passed Test	The code currently passes this test
Failed Test	A failed test needs to be addressed

Test ID	Test Case	Context	Test Description	Test Data	Expected Result	Actual Result	Notes
1.01	Initial Conditions for a flight taking off	initialTakeOffConditions()	Tests for the initial conditions of a flight which requires to take off.		Flight should be positioned on the Airport take off entry point's position. Flight should be requesting to take off, but not permitted to do so. Airport should acknowledge there is a flight on the Runway	As expected.	
1.02	Permitting a flight to take off	permitTakeOff()	Tests for the state of a flight after it has been permitted to take off.		Flight should acknowledge it has been permitted to take off and no longer be requesting to do so. The flight should no longer be considered to be on the runway by the Airport. The flight should ascend and move away from the airport.	As Expected.	Correctness of flight movement is tested in Flight unit tests.
1.02	Initial Conditions for a flight which will land.	initialLandingConditions()	Testing the initial conditions of a flight which has spawned with the airport as it's exit point (i.e it must land to exit the airspace.)		The last waypoint in the flight's route should be the Airport landing exitPoint	As Expected.	Correctness of flight plan changes is tested in Flight Plan tests
1.03	Checking a flight requests to land when it's next target waypoint is the airport	checkRequestToLand()	The flight is updated through it's route until it's target is the final waypoint in the route. At this point, it should be requesting permission to land, but it should not yet be permitted to do so.		The flight is requesting, but not yet permitted, to land	As Expected.	
1.04	Permitting a flight to land	checkPermitToLand()	The flight is updated through it's route until it's target is the final waypoint in the route. The conditions after it being permitted to land are tested.		The flight should be permitted to land, and not requesting to land. The target altitude of the flight should be zero.	As Expected.	Correctness of flight movement is tested in Flight unit Tests
2.01	Testing the add time function	score.addTime()	Testing the function that adds time to the score object.	Time += 100 Time += 50	Time = 150	Time = 150	
2.02	Testing the add manual time function	score.addManualTime()	Testing the function that adds time in manual control mode to the score object.	ManualTime += 100 ManualTime += 900	Manual Time = 1000	Manual Time = 1000	
2.03	Testing the add separation time violated function	score.addSeparationViolated()	Testing the function that adds separation violation time to the score object.	violatedTime += 4 violatedTime += 10	Violated Time = 14	Violated Time = 14	
2.04	Testing the add flight function	score.addFlight()	Testing the function that adds a successful flight to the score object.	Add flight 3 times	Successful Flights = 3	Successful Flights = 3	
2.05	Testing the set difficulty function	score.setDifficulty()	Testing the function that sets the difficulty modifier for the score.	Time = 400 Difficulty = 3 Time = 300 Difficulty = 1	Score = 10 Score = 3	Score = 10 Score = 3	
2.06	Testing the calculate score function	score.calculate()	Testing the function that calculated the current score of the game.	Difficulty = 1 Time = 900 Successful Flights = 6 Separation Violation = 300 Manual Time = 300 Difficulty = 2 Time = 7000 Successful Flights = 3 Separation Violation = 10 Manual Time = 10	Score = 209 Score = 380	Score = 209 Score = 380	