My Project

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Chapter 2

Class Index

2.1 Class List

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: Class that represents a flight plan in the simulation	9
Input	
: Class that reads input for the simulation	1
inputTest	4
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System	
: Main class, controls the simulation	6
Time	1

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Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

/home/uauser/CLionProjects/PSE-Airport/headers/Airplane.h
/home/uauser/CLionProjects/PSE-Airport/headers/Airport.h
/home/uauser/CLionProjects/PSE-Airport/headers/ATC.h
/home/uauser/CLionProjects/PSE-Airport/headers/DesignByContract.h
/home/uauser/CLionProjects/PSE-Airport/headers/Flightplan.h
/home/uauser/CLionProjects/PSE-Airport/headers/Input.h
/home/uauser/CLionProjects/PSE-Airport/headers/Runway.h
/home/uauser/CLionProjects/PSE-Airport/headers/System.h
/home/uauser/CLionProjects/PSE-Airport/headers/TestUtils.h
/home/uauser/CLionProjects/PSE-Airport/headers/Time.h
/home/uauser/CLionProjects/PSE-Airport/src/Airplane.cpp
/home/uauser/CLionProjects/PSE-Airport/src/Airport.cpp
/home/uauser/CLionProjects/PSE-Airport/src/ATC.cpp
/home/uauser/CLionProjects/PSE-Airport/src/Flightplan.cpp
/home/uauser/CLionProjects/PSE-Airport/src/init.cpp
/home/uauser/CLionProjects/PSE-Airport/src/Input.cpp
/home/uauser/CLionProjects/PSE-Airport/src/Runway.cpp
/home/uauser/CLionProjects/PSE-Airport/src/System.cpp
/home/uauser/CLionProjects/PSE-Airport/src/Time.cpp
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsAirplane.cpp
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/home/uauser/CLionProjects/PSE-Airport/test/init_test.cpp
/home/uauser/CLionProjects/PSE-Airport/test/inputTests.cpp
/home/uauser/CLionProjects/PSE-Airport/test/outputTests.cpp
/home/ususer/Cl ionProjects/PSE-Airport/test/Test/Itils con

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Chapter 4

Class Documentation

4.1 Airplane Class Reference

: Class that represents an airplane in the simulation

```
#include <Airplane.h>
```

Public Member Functions

- Airplane ()
- bool properlyInitialized () const
- void increaseAltitude (int difference=1)
- void decreaseAltitude (int difference=1)
- void decreaseTimeRemaining ()
- bool complete () const
- void setAltitude (int altitude)
- void setTimeRemaining (int time)
- void setPassengers (int fPassengers)
- void setGateID (int id)
- void setFuel (int fuel)
- void setSquawk (int squawk)
- EPlaneSize getSize () const
- void setSize (EPlaneSize size)
- EPlaneType getType () const
- void setType (EPlaneType type)
- EPlaneEngine getEngine () const
- void setEngine (EPlaneEngine engine)
- int getAltitude () const
- int getGateID () const
- int getPassengers () const
- const string & getNumber () const
- void setNumber (const string &fNumber)
- const string & getCallsign () const
- void setCallsign (const string &fCallsign)
- const string & getModel () const
- void setModel (const string &fModel)
- EPlaneStatus getStatus () const

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- void setStatus (EPlaneStatus fStatus)
- int getTimeRemaining () const
- void setPosition (const string &)
- · const string & getPosition () const
- void setRequest (EPlaneRequest)
- EPlaneRequest getRequest () const
- Runway * getRunway () const
- void setRunway (Runway *)
- int getFuel () const
- int getSquawk () const

4.1.1 Detailed Description

: Class that represents an airplane in the simulation

4.1.2 Constructor & Destructor Documentation

```
4.1.2.1 Airplane::Airplane ( )
```

Default constructor

ENSURE(properlyInitialized(), "constructor must end in properlyInitialized state");

4.1.3 Member Function Documentation

```
4.1.3.1 bool Airplane::complete ( ) const
```

Checks if all the data members were initialized

REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane::complete");

4.1.3.2 void Airplane::decreaseAltitude (int difference = 1)

Decreases the plane's altitude by a given amount

REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling decreaseAltitude");

REQUIRE(difference > 0, "Difference can't be negative");

REQUIRE(fAltitude - difference >= 0, "New altitude can't be less than 0!");

ENSURE(fAltitude == oldAltitude - difference, "Altitude hasn't been decreased correctly.");

4.1.3.3 void Airplane::decreaseTimeRemaining ()

Decreases the time of the remaining operation by one. If there's no operation busy, it does nothing. REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling decreaseTimeRemaining");

```
4.1.3.4 int Airplane::getAltitude ( ) const
4.1.3.5 const string & Airplane::getCallsign ( ) const
4.1.3.6 EPlaneEngine Airplane::getEngine ( ) const
4.1.3.7 int Airplane::getFuel ( ) const
4.1.3.8 int Airplane::getGateID ( ) const
4.1.3.9 const string & Airplane::getModel ( ) const
4.1.3.10 const string & Airplane::getNumber ( ) const
4.1.3.11 int Airplane::getPassengers ( ) const
4.1.3.12 const string & Airplane::getPosition ( ) const
4.1.3.13 EPlaneRequest Airplane::getRequest ( ) const
4.1.3.14 Runway * Airplane::getRunway ( ) const
4.1.3.15 EPlaneSize Airplane::getSize ( ) const
Getters and setters for the fields of the class.
REQUIRE(properlyInitialized(), "Airplane wasn't initialized when calling Airplane getter/setter");
4.1.3.16 int Airplane::getSquawk ( ) const
4.1.3.17 EPlaneStatus Airplane::getStatus ( ) const
4.1.3.18 int Airplane::getTimeRemaining ( ) const
4.1.3.19 EPlaneType Airplane::getType ( ) const
4.1.3.20 void Airplane::increaseAltitude (int difference = 1)
Increases the plane's altitude by a given amount
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling increaseAltitude");
REQUIRE(difference > 0, "Difference can't be negative");
ENSURE(fAltitude == oldAltitude + difference, "Altitude hasn't been increased correctly.");
4.1.3.21 bool Airplane::properlyInitialized ( ) const
```

Checks if the object is properly initialized

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```
4.1.3.22 void Airplane::setAltitude (int altitude)
Setter for the altitude
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane getter/setter");
REQUIRE(altitude >= 0, "Altitude can't be negative");
4.1.3.23 void Airplane::setCallsign (const string & fCallsign)
4.1.3.24 void Airplane::setEngine ( EPlaneEngine engine )
4.1.3.25 void Airplane::setFuel (int fuel)
Setter for the maximum amount of fuel (in 10.000 units)
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane getter/setter");
REQUIRE(fuel > 0, "Fuel can't be less than 1");
4.1.3.26 void Airplane::setGateID (int id)
Setter for the gate the plane's at
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane getter/setter");
REQUIRE(id \geq= -1, "Gate id can't be less than -1");
4.1.3.27 void Airplane::setModel (const string & fModel)
4.1.3.28 void Airplane::setNumber ( const string & fNumber )
4.1.3.29 void Airplane::setPassengers (int fPassengers)
Setter for the maximum amount of passengers
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane getter/setter");
REQUIRE(passengers >= 0, "Passenger amount can't be negative");
4.1.3.30 void Airplane::setPosition (const string & position)
4.1.3.31 void Airplane::setRequest ( EPlaneRequest request )
4.1.3.32 void Airplane::setRunway ( Runway * runway )
4.1.3.33 void Airplane::setSize ( EPlaneSize size )
4.1.3.34 void Airplane::setSquawk (int squawk)
Setter for the squawk code
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane getter/setter");
REQUIRE(squawk >= 0, "Squawk code can't be negative");
```

```
4.1.3.35 void Airplane::setStatus ( EPlaneStatus fStatus )
4.1.3.36 void Airplane::setTimeRemaining ( int time )
Setter for the time remaining on the operation
REQUIRE(this->properlyInitialized(), "Airplane was't initialized when calling Airplane getter/setter");
REQUIRE(time >= 0, "Time remaining can't be negative");
4.1.3.37 void Airplane::setType ( EPlaneType type )
```

The documentation for this class was generated from the following files:

- /home/uauser/CLionProjects/PSE-Airport/headers/Airplane.h
- /home/uauser/CLionProjects/PSE-Airport/src/Airplane.cpp

4.2 Airport Class Reference

```
#include <Airport.h>
```

Public Member Functions

- Airport ()
- ∼Airport ()
- bool properlyInitialized () const
- void initStack ()
- int getFreeGate ()
- void restoreGate (int id)
- Runway * getRunway (const string &) const
- Runway * getNextRunway (Airplane *airplane) const
- void addRunway (Runway *runway)
- Runway * getFreeRunway (Airplane *plane) const
- · size_t amountOfRunways () const
- bool complete () const
- void drawImpression (Time time, ostream &stream, vector< Flightplan * > plans)
- void setGates (int fGates)
- const string & getName () const
- void setName (const string &fName)
- · const string & getlata () const
- void setlata (const string &flata)
- const string & getCallsign () const
- void setCallsign (const string &fCallsign)
- int getGates () const
- vector< Runway * > getRunways () const

4.2.1 Constructor & Destructor Documentation

```
4.2.1.1 Airport::Airport ( )
```

Default constructor

ENSURE(properlyInitialized(), "Airport wasn't properly initialized after constructing");

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4.2.1.2 Airport:: ∼Airport ()

Destructor

4.2.2 Member Function Documentation

4.2.2.1 void Airport::addRunway (Runway * runway)

Adds a runway to the airport.

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling addRunway.");

REQUIRE(runway != NULL, "Runway cannot be NULL.");

ENSURE(!present, "Runway is already in system.");

ENSURE(fRunways.back() == runway, "Runway was not properly added to the system.");

Parameters

runwa	/	Pointer to runway that needs to be added.	1
-------	---	---	---

4.2.2.2 size_t Airport::amountOfRunways () const

Return the amount of runways the airport has.

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling amountOfRunways.");

Returns

: Amount of runways.

4.2.2.3 bool Airport::complete () const

Checks if all the data members were initialized

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling complete.");

Returns

: Boolean indicating if everything was initialized.

4.2.2.4 void Airport::drawImpression (Time time, ostream & stream, vector< Flightplan * > plans)

Generates a graphical impression for the current state of the airport.

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling drawImpression.");

Parameters

time	time of the impression.
stream	ostream to write the impression to.

```
4.2.2.5 const string & Airport::getCallsign ( ) const
4.2.2.6 int Airport::getFreeGate ( )
Returns the ID of a free gate
REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling getFreeGate.");
REQUIRE(!fGateStack.empty(), "Can't get free gate: no gate in stack.");
REQUIRE(fGates > 0, "Airport has no gates.");
ENSURE(id <= fGates && id > 0, "Gate has an invalid ID.");
ENSURE(fGateStack.top() != id, "Gate wasn't properly popped from the stack.");
Returns
      : ID of a free gate.
4.2.2.7 Runway * Airport::getFreeRunway ( Airplane * plane ) const
Looks for a runway that is free and is suitable for a given airplane.
REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling getFreeRunway.");
REQUIRE(plane != NULL, "Plane object does not exist.");
Parameters
  plane
          Plane that needs the runway.
Returns
     : Pointer to runway, NULL if nothing is found.
4.2.2.8 int Airport::getGates ( ) const
4.2.2.9 const string & Airport::getlata ( ) const
4.2.2.10 const string & Airport::getName ( ) const
Getters and setters for the fields of the class.
REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling getter/setter.");
ENSURE(fField == value, "Field wasn't set properly");
4.2.2.11 Runway * Airport::getNextRunway ( Airplane * airplane ) const
Gets the next runway (for taxiing) based on what the airplane is doing.
REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling getNextRunway.");
REQUIRE(airplane != NULL, "Airplane cannot be NULL.");
```

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Parameters

airplane Airplane that is taxiing.

Returns

: Pointer to the found runway, NULL if nothing is found.

4.2.2.12 Runway * Airport::getRunway (const string & taxipoint) const

Searches the runway with the given taxipoint.

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling getRunway.");

Returns

: Pointer to the found runway, NULL if nothing is found.

```
4.2.2.13 vector< Runway * > Airport::getRunways ( ) const
```

4.2.2.14 void Airport::initStack ()

Initializes the gateStack

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling initStack."); REQUIRE(fGateStack.empty(), "Can't initialize gate stack, already in use.");

4.2.2.15 bool Airport::properlyInitialized () const

Checks if the object is properly initialized

Returns

: Boolean indicating if properly initialized or not.

4.2.2.16 void Airport::restoreGate (int id)

Restores a gate, making it available for use again.

REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling restoreGate.");

REQUIRE(id <= fGates && id > 0, "Gate ID is invalid.");

REQUIRE(fGates > 0, "Airport has no gates.");

ENSURE(fGateStack.top() == id, "Gate was not properly added to stack");

Parameters

id ID of gate to restore

4.3 ATC Class Reference 15

```
4.2.2.17 void Airport::setCallsign (const string & fCallsign)
4.2.2.18 void Airport::setGates (int fGates)
Set the amount of gates in the airport.
REQUIRE(properlyInitialized(), "Airport wasn't properly initialized when calling getter/setter.");
REQUIRE(fGates >= 0, "Number of gates cannot be negative!");
ENSURE(fGates == gates, "Field wasn't set properly");
```

Parameters

fGates	Amount of gates.
--------	------------------

```
4.2.2.19 void Airport::setlata (const string & flata)
```

```
4.2.2.20 void Airport::setName ( const string & fName )
```

The documentation for this class was generated from the following files:

- /home/uauser/CLionProjects/PSE-Airport/headers/Airport.h
- /home/uauser/CLionProjects/PSE-Airport/src/Airport.cpp

4.3 ATC Class Reference

```
#include <ATC.h>
```

Public Member Functions

- ATC (ostream &stream, bool test)
- ∼ATC ()
- bool properlyInitialized () const
- void sendRequest (Time time, Airplane *source)
- int getQueueSize () const
- ATCRequest * getNextRequest ()
- void doHeartbeat (Time time)
- void processApproach (Airplane *airplane, Time time)
- void processDescend (Airplane *airplane, Time time)
- void processTaxiArrival (Airplane *airplane, Time time)
- void processIFRClearance (Airplane *airplane, Time time)
- void processPushback (Airplane *airplane, Time time)
- void processTaxiInitialise (Airplane *airplane, Time time)
- void processTaxiInstruction (Airplane *airplane, Time time)
- void processTakeOff (Airplane *airplane, Time time)
- void processTakeOffRunway (Airplane *airplane, Time time)
- void sendMessage (const string &message)
- int getSquawk (Airplane *)
- queue < ATCRequest * > * getQueue ()

- void setLastActive (Time)
- Time getLastActive () const
- Airport * getAirport () const
- void setAirport (Airport *)
- bool get3occupied () const
- void set3occupied (bool)
- bool get5occupied () const
- void set5occupied (bool)

Static Public Member Functions

• static string formatMessage (Time time, string source, string message)

4.3.1 Constructor & Destructor Documentation

4.3.1.1 ATC::ATC (ostream & stream, bool test)

Constructor

ENSURE(properlyInitialized(), "ATC was not properly initialized after constructing.");

Parameters

stream ostream to write to.

4.3.1.2 ATC:: \sim ATC ()

Destructor

4.3.2 Member Function Documentation

4.3.2.1 void ATC::doHeartbeat (Time time)

Main function of the ATC, needs to be called every time we advance in time. Handles requests and responds correctly.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling doHeartbeat.");

Parameters

time | Time of "heartbeat".

4.3.2.2 string ATC::formatMessage (Time time, string source, string message) [static]

Creates a correctly formatted ATC message when the contents are given.

4.3 ATC Class Reference 17

Parameters

time	Time of message.
source	Sender of message.
message	Content of message.

Returns

```
4.3.2.3 bool ATC::get3occupied ( ) const
```

: Formatted message.

```
4.3.2.4 bool ATC::get5occupied ( ) const
```

```
4.3.2.6 Time ATC::getLastActive ( ) const
```

```
4.3.2.7 ATCRequest * ATC::getNextRequest ( )
```

Get the next request that needs to be handled by the ATC.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling getNextRequest."); ENSURE(getQueue()->front() != rqst, "Message wasn't removed from the queue."); ENSURE(msg != NULL, "Request popped from queue is NULL.");

Returns

: Pointer to the request, NULL if queue is empty.

```
4.3.2.8 queue < ATCRequest * > * ATC::getQueue ( )
```

Getters and setters for the fields of the class.

REQUIRE(properlyInitialized(), "ATC wasn't properly initialized when calling getter/setter.");

Setters:

ENSURE(fField == value, "Field wasn't set properly");

```
4.3.2.9 int ATC::getQueueSize ( ) const
```

Return the amount of requests that are queued.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling getQueueSize."); ENSURE(size >= 0, "Queue has a negative size.");

Returns

: Size of the queue.

```
4.3.2.10 int ATC::getSquawk ( Airplane * airplane )
```

Generates a squawk code for a given plane. The returned code will not be generated for any other plane. REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling getSquawk.");

```
4.3.2.11 void ATC::processApproach ( Airplane * airplane, Time time )
```

Processes a request for approach.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling processApproach.");

Parameters

airplane	the sender of the request
time	current time

4.3.2.12 void ATC::processDescend (Airplane * airplane, Time time)

Processes a request for descend.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling processDescend.");

Parameters

airplane	the sender of the request
time	current time

4.3.2.13 void ATC::processIFRClearance (Airplane * airplane, Time time)

Processes a request for IFR clearance.

Parameters

airplane	the sender of the request
time	current time

4.3.2.14 void ATC::processPushback (Airplane * airplane, Time time)

Processes a request for pushback.

Parameters

airplane	the sender of the request
time	current time

4.3.2.15 void ATC::processTakeOff (Airplane * airplane, Time time)

Processes a request for takeoff when waiting at runway.

Parameters

airplane	the sender of the request
time	current time

4.3 ATC Class Reference

4.3.2.16 void ATC::processTakeOffRunway (Airplane * airplane, Time time)

Processes a request for takeoff when waiting on runway.

Parameters

airplane	the sender of the request
time	current time

4.3.2.17 void ATC::processTaxiArrival (Airplane * airplane, Time time)

Processes a request for taxiing at arrival.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling processTaxiArrival.");

Parameters

airplane	the sender of the request
time	current time

4.3.2.18 void ATC::processTaxiInitialise (Airplane * airplane, Time time)

Processes a request to start taxiing.

Parameters

airplane	the sender of the request
time	current time

4.3.2.19 void ATC::processTaxiInstruction (Airplane * airplane, Time time)

Processes a request for a taxi instruction.

Parameters

airplane	the sender of the request
time	current time

4.3.2.20 bool ATC::properlyInitialized () const

Checks if the object is properly initialized

Returns

: Boolean indicating if properly initialized or not.

```
4.3.2.21 void ATC::sendMessage ( const string & message )
```

Write a message to the ATC stream.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling sendMessage.");

Parameters

	message	Message that needs to be send.	
--	---------	--------------------------------	--

4.3.2.22 void ATC::sendRequest (Time time, Airplane * source)

Send a request to the ATC.

REQUIRE(this->properlyInitialized(), "ATC was not properly initialized when calling sendRequest."); REQUIRE(source != NULL, "Source is NULL.");

ENSURE(getQueue()->back() == rqst, "Request wasn't queued properly.");

Parameters

time	Time of the request.
source	Airplane that made the request.

```
4.3.2.23 void ATC::set3occupied (bool occupied)
```

4.3.2.24 void ATC::set5occupied (bool occupied)

4.3.2.25 void ATC::setAirport (Airport * airport)

4.3.2.26 void ATC::setLastActive (Time time)

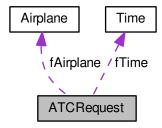
The documentation for this class was generated from the following files:

- /home/uauser/CLionProjects/PSE-Airport/headers/ATC.h
- /home/uauser/CLionProjects/PSE-Airport/src/ATC.cpp

4.4 ATCRequest Struct Reference

#include <ATC.h>

Collaboration diagram for ATCRequest:



Public Member Functions

• ATCRequest (Time time, Airplane *plane)

Public Attributes

- · Time fTime
- Airplane * fAirplane

4.4.1 Constructor & Destructor Documentation

4.4.1.1 ATCRequest::ATCRequest (Time time, Airplane * plane) [inline]

Constructor.

4.4.2 Member Data Documentation

4.4.2.1 Airplane * ATCRequest::fAirplane

Airplane that sent request

4.4.2.2 Time ATCRequest::fTime

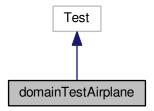
Time message was sent.

The documentation for this struct was generated from the following file:

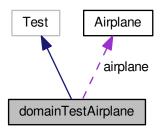
• /home/uauser/CLionProjects/PSE-Airport/headers/ATC.h

4.5 domainTestAirplane Class Reference

Inheritance diagram for domainTestAirplane:



Collaboration diagram for domainTestAirplane:



Protected Attributes

• Airplane airplane

4.5.1 Member Data Documentation

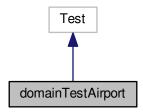
4.5.1.1 Airplane domainTestAirplane::airplane [protected]

The documentation for this class was generated from the following file:

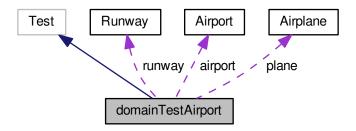
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsAirplane.cpp

4.6 domainTestAirport Class Reference

Inheritance diagram for domainTestAirport:



Collaboration diagram for domainTestAirport:



Protected Attributes

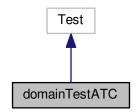
- Airport airport
- Runway runway
- Airplane plane
- 4.6.1 Member Data Documentation
- **4.6.1.1 Airport domainTestAirport::airport** [protected]
- **4.6.1.2** Airplane domainTestAirport::plane [protected]
- **4.6.1.3 Runway domainTestAirport::runway** [protected]

The documentation for this class was generated from the following file:

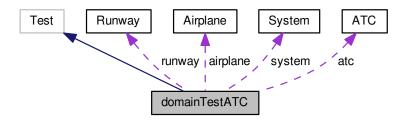
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsAirport.cpp

4.7 domainTestATC Class Reference

Inheritance diagram for domainTestATC:



Collaboration diagram for domainTestATC:



Protected Member Functions

virtual void SetUp ()

Protected Attributes

- ofstream out
- System system
- Runway * runway
- Airplane * airplane
- ATC * atc

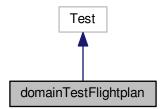
- 4.7.1 Member Function Documentation
- 4.7.1.1 virtual void domainTestATC::SetUp() [inline], [protected], [virtual]
- 4.7.2 Member Data Documentation
- **4.7.2.1 Airplane*** domainTestATC::airplane [protected]
- **4.7.2.2** ATC* domainTestATC::atc [protected]
- **4.7.2.3 ofstream domainTestATC::out** [protected]
- **4.7.2.4 Runway*** domainTestATC::runway [protected]
- **4.7.2.5 System domainTestATC::system** [protected]

The documentation for this class was generated from the following file:

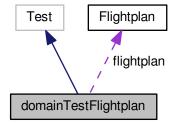
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsATC.cpp

4.8 domainTestFlightplan Class Reference

Inheritance diagram for domainTestFlightplan:



Collaboration diagram for domainTestFlightplan:



Protected Attributes

• Flightplan flightplan

4.8.1 Member Data Documentation

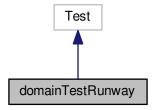
4.8.1.1 Flightplan domainTestFlightplan::flightplan [protected]

The documentation for this class was generated from the following file:

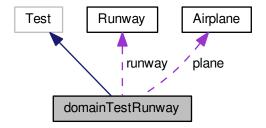
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsFlightplan.cpp

4.9 domainTestRunway Class Reference

Inheritance diagram for domainTestRunway:



Collaboration diagram for domainTestRunway:



Protected Attributes

- Runway runway
- Airplane plane

4.9.1 Member Data Documentation

4.9.1.1 Airplane domainTestRunway::plane [protected]

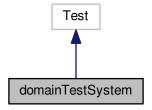
4.9.1.2 Runway domainTestRunway::runway [protected]

The documentation for this class was generated from the following file:

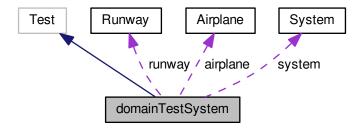
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsRunway.cpp

4.10 domainTestSystem Class Reference

Inheritance diagram for domainTestSystem:



Collaboration diagram for domainTestSystem:



Protected Member Functions

virtual void SetUp ()

Protected Attributes

- Runway * runway
- ofstream out
- Airplane * airplane
- System system

4.10.1 Member Function Documentation

```
4.10.1.1 virtual void domainTestSystem::SetUp() [inline], [protected], [virtual]
```

4.10.2 Member Data Documentation

```
4.10.2.1 Airplane* domainTestSystem::airplane [protected]
```

```
4.10.2.2 ofstream domainTestSystem::out [protected]
```

4.10.2.3 Runway* domainTestSystem::runway [protected]

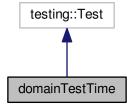
4.10.2.4 System domainTestSystem::system [protected]

The documentation for this class was generated from the following file:

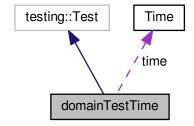
/home/uauser/CLionProjects/PSE-Airport/test/domainTestsSystem.cpp

4.11 domainTestTime Class Reference

Inheritance diagram for domainTestTime:



Collaboration diagram for domainTestTime:



Protected Attributes

· Time time

4.11.1 Member Data Documentation

4.11.1.1 Time domainTestTime::time [protected]

The documentation for this class was generated from the following file:

• /home/uauser/CLionProjects/PSE-Airport/test/domainTestsTime.cpp

4.12 Flightplan Class Reference

: Class that represents a flight plan in the simulation

```
#include <Flightplan.h>
```

Public Member Functions

- Flightplan ()
- ∼Flightplan ()
- · bool properlyInitialized () const
- void setDeparture (int fDeparture)
- void setArrival (int fArrival)
- void setInterval (int fInterval)
- EEvent getEvent (Time time)
- bool complete () const
- const string & getDestination () const
- void setDestination (const string &fDestination)
- int getDeparture () const
- int getArrival () const
- · int getInterval () const
- void setAirplane (Airplane *)
- Airplane * getAirplane () const

```
4.12.1 Detailed Description
: Class that represents a flight plan in the simulation
4.12.2 Constructor & Destructor Documentation
4.12.2.1 Flightplan::Flightplan ( )
Default constructor
ENSURE(properlyInitialized(), "constructor must end in properlyInitialized state");
4.12.2.2 Flightplan::~Flightplan ( )
Destructor
4.12.3 Member Function Documentation
4.12.3.1 bool Flightplan::complete ( ) const
Checks if all the data members were initialized
REQUIRE(this->properlyInitialized(), "Flightplan was't initialized when calling complete");
4.12.3.2 Airplane * Flightplan::getAirplane ( ) const
4.12.3.3 int Flightplan::getArrival ( ) const
4.12.3.4 int Flightplan::getDeparture ( ) const
4.12.3.5 const string & Flightplan::getDestination ( ) const
Getters and setters for the fields of the class.
REQUIRE(properlyInitialized(), "Flightplan wasn't initialized when calling getter/setter");
4.12.3.6 EEvent Flightplan::getEvent ( Time time )
Returns the event at the given time
REQUIRE(this->properlyInitialized(), "Flightplan was't initialized when calling getEvent");
4.12.3.7 int Flightplan::getInterval ( ) const
4.12.3.8 bool Flightplan::properlyInitialized ( ) const
```

Checks if the object is properly initialized

```
4.12.3.9 void Flightplan::setAirplane ( Airplane * airplane )

4.12.3.10 void Flightplan::setArrival ( int fArrival )

Setter for arrival time

REQUIRE(this->properlyInitialized(), "Flightplan was't initialized when calling setArrival");

REQUIRE(arrival >= 0 && arrival < 60, "Arrival has to be between 0 and 60");

4.12.3.11 void Flightplan::setDeparture ( int fDeparture )

Setter for departure time

REQUIRE(this->properlyInitialized(), "Flightplan was't initialized when calling setDeparture");

REQUIRE(departure >= 0 && departure < 60, "Departure has to be between 0 and 60");

4.12.3.12 void Flightplan::setDestination ( const string & fDestination )

4.12.3.13 void Flightplan::setInterval ( int fInterval )

Setter for interval

REQUIRE(this->properlyInitialized(), "Flightplan was't initialized when calling setInterval");

REQUIRE(interval > 0, "Interval has to be at least 1");
```

The documentation for this class was generated from the following files:

- /home/uauser/CLionProjects/PSE-Airport/headers/Flightplan.h
- /home/uauser/CLionProjects/PSE-Airport/src/Flightplan.cpp

4.13 Input Class Reference

: Class that reads input for the simulation

```
#include <Input.h>
```

Public Member Functions

- Input ()
- · bool properlyInitialized () const
- · void read (const string &filename, ostream &errorLog=cerr)
- void addAirport (Airport *airport)
- void addRunway (Runway *runway)
- void addFlightplan (Flightplan *flightplan)
- Airport * findAirportByIATA (const string &iata) const
- vector< Airport * > getAirports () const
- vector< Flightplan * > getFlightplans () const

Static Public Member Functions

static bool isNumber (const string &)

```
4.13.1 Detailed Description
: Class that reads input for the simulation
4.13.2 Constructor & Destructor Documentation
4.13.2.1 Input::Input ( )
Default constructor
ENSURE(properlyInitialized(), "constructor must end in properlyInitialized state");
4.13.3 Member Function Documentation
4.13.3.1 void Input::addAirport ( Airport * airport )
Adds an airport to the simulation
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling addAirport");
REQUIRE(airport->complete(), "Airport has to be completely initialized to add it to the simulation");
ENSURE(airports.back() == airport, "Airplane was not added to simulation.");
4.13.3.2 void Input::addFlightplan ( Flightplan * flightplan )
Adds a flightplan to the simulation with the given specifications
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling addFlightplan");
REQUIRE(flightplan->complete(), "Flightplan has to be completely initialized to add it to the simulation");
ENSURE(flightplans.back() == flightplan, "Flightplan was not added to simulation.");
4.13.3.3 void Input::addRunway ( Runway * runway )
Adds a runway to the simulation with the given specifications
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling addRunway");
REQUIRE(runway->complete(), "Runway has to be completely initialized to add it to the simulation");
ENSURE(runway->getAirport()->getRunways().back() == runway, "Runway was not added to the airport");
4.13.3.4 Airport * Input::findAirportByIATA ( const string & iata ) const
Finds an airport with a specific IATA
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling findAirportByIATA");
4.13.3.5 vector < Airport * > Input::getAirports ( ) const
Getter for the airports in the simulation
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling getAirports");
Returns
```

vec of all airports

```
4.13.3.6 vector < Flightplan * > Input::getFlightplans ( ) const

Getter for the flightplans in the simulation
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling getFlightplans");

Returns
vec of all flightplans

4.13.3.7 bool Input::isNumber ( const string & input ) [static]

Checks if a given string is a valid unsigned int
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling isNumber");

4.13.3.8 bool Input::properlyInitialized ( ) const

Checks if the object is properly initialized

4.13.3.9 void Input::read ( const string & filename, ostream & errorLog = cerr )

Reads the given file and stores the information
REQUIRE(this->properlyInitialized(), "Input was't initialized when calling read");
Parameters
```

The documentation for this class was generated from the following files:

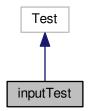
name of the file with input

- /home/uauser/CLionProjects/PSE-Airport/headers/Input.h
- /home/uauser/CLionProjects/PSE-Airport/src/Input.cpp

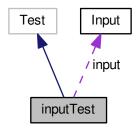
filename

4.14 inputTest Class Reference

Inheritance diagram for inputTest:



Collaboration diagram for inputTest:



Protected Attributes

• Input input

4.14.1 Member Data Documentation

4.14.1.1 Input inputTest::input [protected]

The documentation for this class was generated from the following file:

• /home/uauser/CLionProjects/PSE-Airport/test/inputTests.cpp

4.15 Runway Class Reference

#include <Runway.h>

Public Member Functions

- Runway ()
- bool complete () const
- bool properlyInitialized () const
- bool validForAirplane (Airplane *plane) const
- ERunwayType getType () const
- void setType (ERunwayType type)
- int getLength () const
- void setLength (int length)
- const string & getName () const
- void setName (const string &fName)
- bool isFree () const
- void setFree (bool free)
- string getTaxiPoint () const
- void setTaxiPoint (const string &)
- Airport * getAirport () const
- void setAirport (Airport *fAirport)

4.15.1 Constructor & Destructor Documentation

```
4.15.1.1 Runway::Runway ( )
```

Constructor for the Runway class.

ENSURE(properlyInitialized(), "Runway wasn't properly initialized after constructing.");

4.15.2 Member Function Documentation

```
4.15.2.1 bool Runway::complete ( ) const
```

Checks if all the data members were initialized

REQUIRE(properlyInitialized(), "Runway wasn't properly initialized when calling complete.");

Returns

: Boolean indicating if all members were initialized

```
4.15.2.2 Airport * Runway::getAirport ( ) const
```

4.15.2.3 int Runway::getLength () const

4.15.2.4 const string & Runway::getName () const

4.15.2.5 string Runway::getTaxiPoint () const

4.15.2.6 ERunwayType Runway::getType () const

Getters and setters for the fields of the class.

REQUIRE(properlyInitialized(), "Runway wasn't properly initialized when calling getter/setter.");

Setters:

ENSURE(fField == value, "Field wasn't set properly");

```
4.15.2.7 bool Runway::isFree ( ) const
4.15.2.8 bool Runway::properlyInitialized ( ) const
Checks if the object is properly initialized
Returns
      : Boolean indicating if properly initialized or not.
4.15.2.9 void Runway::setAirport ( Airport * fAirport )
4.15.2.10 void Runway::setFree ( bool free )
4.15.2.11 void Runway::setLength (int length)
4.15.2.12 void Runway::setName ( const string & fName )
4.15.2.13 void Runway::setTaxiPoint ( const string & name )
4.15.2.14 void Runway::setType ( ERunwayType type )
4.15.2.15 bool Runway::validForAirplane ( Airplane * plane ) const
Check if this runway is valid for the provided airplane.
REQUIRE(properlyInitialized(), "Runway wasn't properly initialized when calling validForAirplane.");
REQUIRE(plane != NULL, "Plane object does not exist.");
Parameters
          Airplane to check validity for.
 plane
```

Returns

: Boolean indicating if valid or not.

The documentation for this class was generated from the following files:

- · /home/uauser/CLionProjects/PSE-Airport/headers/Runway.h
- /home/uauser/CLionProjects/PSE-Airport/src/Runway.cpp

4.16 System Class Reference

: Main class, controls the simulation

#include <System.h>

Public Member Functions

- System (ostream &atc, Time end)
- System ()
- ∼System ()
- · bool properlyInitialized () const
- void setEndTime (Time end)
- void initializeATC (ostream &log, bool test=false)
- void import (Input &)
- void info (const string &filename="../output/info.txt")
- void run (ostream &log, const string &impressionName="../output/impressions/impression")
- bool simulationFinished () const
- void approach (Airplane *, ostream &log)
- void descend (Airplane *, ostream &log)
- void circle (Airplane *, ostream &log)
- void taxiArrival (Airplane *, ostream &log)
- void crossArrival (Airplane *, ostream &log)
- void deboard (Airplane *, ostream &log)
- void technicalCheck (Airplane *, ostream &log)
- void land (Airplane *, ostream &log)
- void ascend (Airplane *, ostream &fLog)
- void onRunway (Airplane *, ostream &fLog)
- void atRunway (Airplane *, ostream &fLog)
- void taxiDepartureCross (Airplane *, ostream &fLog)
- void taxiDepartureStep (Airplane *, ostream &fLog)
- void taxiDepartureStart (Airplane *, ostream &fLog)
- void pushback (Airplane *, ostream &fLog)
- void prepare (Airplane *, ostream &fLog)
- void takeoff (Airplane *, ostream &log)
- Airport * getAirport () const
- vector< Flightplan * > getFlightplans () const
- ATC * getATC () const
- Time getTime () const

4.16.1 Detailed Description

: Main class, controls the simulation

4.16.2 Constructor & Destructor Documentation

```
4.16.2.1 System::System (ostream & atc, Time end)
```

Constructor

ENSURE(properlyInitialized(), "constructor must end in properlyInitialized state");

4.16.2.2 System::System()

Default constructor

ENSURE(properlyInitialized(), "constructor must end in properlyInitialized state");

```
4.16.2.3 System::∼System ( )
Destructor
4.16.3 Member Function Documentation
4.16.3.1 void System::approach ( Airplane * plane, ostream & log )
Performs the approach of a given plane. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was't initialized when calling approach");
4.16.3.2 void System::ascend ( Airplane * plane, ostream & fLog )
Ascends an airplane to 5000ft. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling ascend.");
4.16.3.3 void System::atRunway ( Airplane * plane, ostream & fLog )
Lets an airplane wait AT a runway until instructions are given. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling atRunway");
4.16.3.4 void System::circle ( Airplane * plane, ostream & log )
Performs the circling of a given plane. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was't initialized when calling circle");
4.16.3.5 void System::crossArrival ( Airplane * plane, ostream & log )
Crosses a runway Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was't initialized when calling crossArrival");
4.16.3.6 void System::deboard ( Airplane * plane, ostream & log )
Performs the deboarding of a given plane. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was't initialized when calling deboard");
4.16.3.7 void System::descend ( Airplane * plane, ostream & log )
Performs the descend of a given plane. Events are logged to the given ostream&.
```

REQUIRE(this->properlyInitialized(), "System was't initialized when calling descend");

```
4.16.3.8 Airport * System::getAirport ( ) const
Getter for the airport in the simulation
REQUIRE(this->properlyInitialized(), "System was't initialized when calling getAirport");
4.16.3.9 ATC * System::getATC ( ) const
Getter for the air traffic control in the simulation
REQUIRE(this->properlyInitialized(), "System was't initialized when calling getATC");
4.16.3.10 vector< Flightplan * > System::getFlightplans ( ) const
Getter for the flightplans in the simulation
REQUIRE(this->properlyInitialized(), "System was't initialized when calling getFlightplans);
4.16.3.11 Time System::getTime ( ) const
Getter for the current time
REQUIRE(this->properlyInitialized(), "System was't initialized when calling getTime");
4.16.3.12 void System::import ( Input & input )
Imports the given input
REQUIRE(this->properlyInitialized(), "System was't initialized when calling import");
4.16.3.13 void System::info ( const string & filename = " . . /output/info.txt" )
Logs information of the airports and airplanes to a text file
REQUIRE(this->properlyInitialized(), "System was't initialized when calling info");
REQUIRE(fAirport != NULL, "No airport in the simulation");
Parameters
  filename
             name of the to be generated txt file, default to "../output/info.txt"
4.16.3.14 void System::initializeATC ( ostream & log, bool test = false )
Initializes the air traffic control of the simulation with an ostream
REQUIRE(this->properlyInitialized(), "System was't initialized when calling initializeATC");
4.16.3.15 void System::land ( Airplane * plane, ostream & log )
Lands an airplane on the airport of the simulation. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was't initialized when calling land");
```

```
4.16.3.16 void System::onRunway ( Airplane * plane, ostream & fLog )
Lets an airplane wait ON a runway before taking off. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling onRunway.");
4.16.3.17 void System::prepare ( Airplane * plane, ostream & fLog )
Refuels the airplane and lets passengers board. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling prepare");
4.16.3.18 bool System::properlyInitialized ( ) const
Checks if the object is properly initialized
4.16.3.19 void System::pushback ( Airplane * plane, ostream & fLog )
Pushes an airplane back from the gate. Events are logged to the given ostream&.
REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling pushback");
4.16.3.20 void System::run ( ostream & log, const string & impressionName =
          "../output/impressions/impression")
Runs the complete simulation
REQUIRE(this->properlyInitialized(), "System was't initialized when calling run");
REQUIRE(fAirport != NULL, "No airport in the simulation.");
REQUIRE(!simulationFinished(), "Simulation is already finished");.
ENSURE(simulationFinished(), "Simulation is not finished yet, error occured");
4.16.3.21 void System::setEndTime ( Time end )
Sets the end time of the simulation
REQUIRE(this->properlyInitialized(), "System was't initialized when calling setEndTime");
4.16.3.22 bool System::simulationFinished ( ) const
Checks if the simulation has ended, i.e. specified end time has been reached
REQUIRE(this->properlyInitialized(), "System was't initialized when calling simulationFinished");
4.16.3.23 void System::takeoff ( Airplane * plane, ostream & log )
Performs a takeoff of a plane on an airport Logs the info to an output stream, defaulted to "cout".
REQUIRE: plane status is kGate && a runway at target airport is available && at least one airport in the system
```

ENSURE: plane status is kFinished

4.17 Time Class Reference 41

```
4.16.3.24 void System::taxiArrival ( Airplane * plane, ostream & log )

Performs the taxiing upon arrival of a given plane. Events are logged to the given ostream&.

REQUIRE(this->properlyInitialized(), "System was't initialized when calling taxiArrival");

4.16.3.25 void System::taxiDepartureCross ( Airplane * plane, ostream & fLog )

Performs a cross. Events are logged to the given ostream&.

REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling taxiDepartureCross");

4.16.3.26 void System::taxiDepartureStart ( Airplane * plane, ostream & fLog )

Lets an airplane wait before taxiing. Events are logged to the given ostream&.

REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling taxiDepartureStart");

4.16.3.27 void System::taxiDepartureStep ( Airplane * plane, ostream & fLog )

Performs the next taxi-step. Events are logged to the given ostream&.

REQUIRE(this->properlyInitialized(), "System was not properly initialized when calling taxiDepartureStep");

4.16.3.28 void System::technicalCheck ( Airplane * plane, ostream & log )
```

The documentation for this class was generated from the following files:

Performs the technical check of the plane Events are logged to the given ostream&.

REQUIRE(this->properlyInitialized(), "System was't initialized when calling technicalCheck");

- /home/uauser/CLionProjects/PSE-Airport/headers/System.h
- /home/uauser/CLionProjects/PSE-Airport/src/System.cpp

4.17 Time Class Reference

```
#include <Time.h>
```

Public Member Functions

- Time (int hour=12, int minute=0)
- string formatted () const
- void advance (int minutes=1)
- void setMinute (int minute)
- int getMinute () const
- void setHour (int hour)
- int getHour () const
- bool operator== (const Time &) const
- bool operator< (const Time &) const

```
4.17.1 Constructor & Destructor Documentation
4.17.1.1 Time::Time ( int hour = 12, int minute = 0 )
Constructor, sets the time Defaults to 12:00, which is the starting point of the simulation
REQUIRE(minute < 60 && minute >= 0, "Minute has to be between 0 and 60");
REQUIRE(hour < 24 && hour >= 0, "Hour has to be between 0 and 24");
4.17.2 Member Function Documentation
4.17.2.1 void Time::advance (int minutes = 1)
Advances the time by an amount of minutes
REQUIRE(minutes >= 0, "Advancing by a negative amount of minutes is not possible");
4.17.2.2 string Time::formatted ( ) const
Return the time in a formatted style like such: "13:45"
4.17.2.3 int Time::getHour ( ) const
Getter for the hour
4.17.2.4 int Time::getMinute ( ) const
Getter for the minute
4.17.2.5 bool Time::operator < ( const Time & time ) const
Operator< overloaded
4.17.2.6 bool Time::operator== ( const Time & time ) const
Operator== overloaded
4.17.2.7 void Time::setHour (int hour)
Setter for the hour.
REQUIRE(hour < 24 \&\& hour >= 0, "Hour has to be between 0 and 24");
4.17.2.8 void Time::setMinute (int minute)
Setter for the minute.
REQUIRE(minute < 60 && minute >= 0, "Minute has to be between 0 and 60");
The documentation for this class was generated from the following files:
```

- /home/uauser/CLionProjects/PSE-Airport/headers/Time.h
- /home/uauser/CLionProjects/PSE-Airport/src/Time.cpp

Chapter 5

File Documentation

5.1 /home/uauser/CLionProjects/PSE-Airport/CMakeLists.txt File Reference

Functions

• cmake_minimum_required (VERSION 3.6) project(ProjectVliegveld) set(CMAKE_CXX_STANDARD 98) set(CMAKE_CXX_FLAGS"-Wall -Werror") set(CMAKE_EXE_LINKER_FLAGS-pthread) include_\(\cdot\) directories(gtest/include) link_directories(gtest/lib) set(RELEASE_SOURCE_FILES src/init.cpp src/Airplane.\(\cdot\) cpp src/Airport.cpp src/Runway.cpp src/System.cpp src/Input.cpp src/Flightplan.cpp src/Time.cpp src/ATC.\(\cdot\) cpp tinyXML/tinystr.cpp tinyXML/tinyxml.cpp tinyXML/tinyxmlerror.cpp tinyXML/tinyxmlparser.cpp) set(DEB\(\cdot\) UG_SOURCE_FILES test/init_test.cpp test/inputTests.cpp test/outputTests.cpp test/domainTestsAirplane.\(\cdot\) cpp test/domainTestsAirport.cpp test/domainTestsFlightplan.cpp test/domain\(\cdot\) TestsRunway.cpp test/domainTestsSystem.cpp test/domainTestsTime.cpp test/TestUtils.cpp src/Airplane.cpp src/Airport.cpp src/Runway.cpp src/System.cpp src/Input.cpp src/Flightplan.cpp src/Time.cpp src/ATC.\(\cdot\) cpp tinyXML/tinystr.cpp tinyXML/tinyxml.cpp tinyXML/tinyxmlerror.cpp tinyXML/tinyxmlparser.cpp) add\(\cdot\) executable(pv \$

5.1.1 Function Documentation

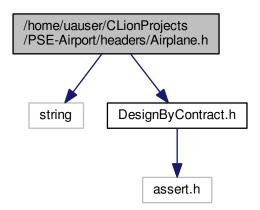
5.1.1.1 cmake_minimum_required (VERSION 3. 6)

5.2 /home/uauser/CLionProjects/PSE-Airport/headers/Airplane.h File Reference

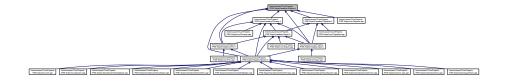
```
#include <string>
#include "DesignByContract.h"
```

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Include dependency graph for Airplane.h:



This graph shows which files directly or indirectly include this file:



Classes

- · class Airplane
 - : Class that represents an airplane in the simulation

Enumerations

- enum EPlaneStatus {
 kApproaching, kDescending, kTaxiArrival, kTaxiDeparture, kCircling, kDeboarding, kTechnicalCheck, kGate, kDeparture, kAway, kAirport, kAscending, kPushback, kWaitingForDeparture, kParked, kCrossingArrival, kCrossingDeparture }
- enum EPlaneType {
 kPrivate, kAirline, kMilitary, kEmergency,
 kDefaultType }
- enum EPlaneSize { kSmall, kMedium, kLarge, kDefaultSize }
- enum EPlaneEngine { kPropeller, kJet, kDefaultEngine }
- enum EPlaneRequest {
 kPending, kAccepted, kDenied, kConfirmed,
 kAcceptedImmediate, kIdle }

5.2.1 Enumeration Type Documentation

5.2.1.1 enum EPlaneEngine

Enumerator

kPropeller

kJet

kDefaultEngine

5.2.1.2 enum EPlaneRequest

Enumerator

kPending

kAccepted

kDenied

kConfirmed

kAcceptedImmediate

kldle

5.2.1.3 enum EPlaneSize

Enumerator

kSmall

kMedium

kLarge

kDefaultSize

5.2.1.4 enum EPlaneStatus

Enumerator

kApproaching

kDescending

kTaxiArrival

kTaxiDeparture

kCircling

kDeboarding

kTechnicalCheck

kGate

kDeparture

kAway

kAirport

kAscending

kPushback

kWaitingForDeparture

kParked

kCrossingArrival

kCrossingDeparture

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5.2.1.5 enum EPlaneType

Enumerator

kPrivate

kAirline

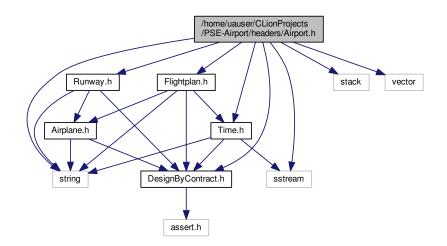
kMilitary

kEmergency

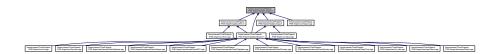
kDefaultType

5.3 /home/uauser/CLionProjects/PSE-Airport/headers/Airport.h File Reference

```
#include <string>
#include <stack>
#include <vector>
#include <sstream>
#include "DesignByContract.h"
#include "Runway.h"
#include "Time.h"
#include "Flightplan.h"
Include dependency graph for Airport.h:
```



This graph shows which files directly or indirectly include this file:

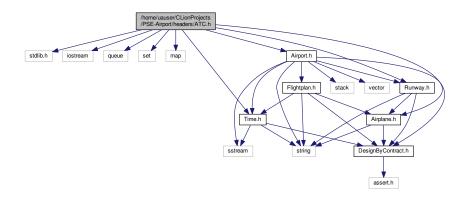


Classes

· class Airport

5.4 /home/uauser/CLionProjects/PSE-Airport/headers/ATC.h File Reference

```
#include <stdlib.h>
#include <iostream>
#include <queue>
#include <set>
#include <map>
#include "Airplane.h"
#include "Runway.h"
#include "Time.h"
#include "Airport.h"
Include dependency graph for ATC.h:
```



This graph shows which files directly or indirectly include this file:



Classes

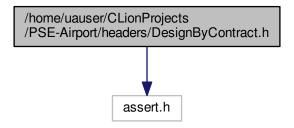
- struct ATCRequest
- class ATC

5.5 /home/uauser/CLionProjects/PSE-Airport/headers/DesignByContract.h File Reference

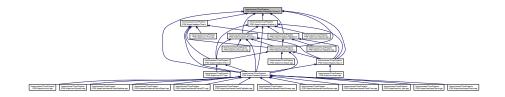
#include <assert.h>

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Include dependency graph for DesignByContract.h:



This graph shows which files directly or indirectly include this file:



Macros

- #define REQUIRE(assertion, what) if (!(assertion)) __assert (what, __FILE__, __LINE__)
- #define ENSURE(assertion, what) if (!(assertion)) __assert (what, __FILE__, __LINE__)

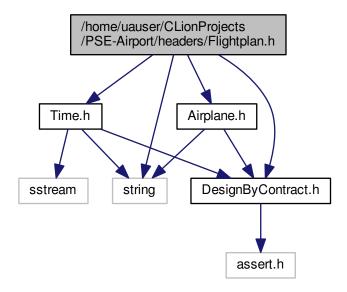
5.5.1 Macro Definition Documentation

- 5.5.1.1 #define ENSURE(assertion, what) if (!(assertion)) _assert (what, _FILE__, _LINE__)
- 5.5.1.2 #define REQUIRE(assertion, what) if (!(assertion)) __assert (what, __FILE__, __LINE__)

5.6 /home/uauser/CLionProjects/PSE-Airport/headers/Flightplan.h File Reference

```
#include <string>
#include "DesignByContract.h"
#include "Time.h"
#include "Airplane.h"
```

Include dependency graph for Flightplan.h:



This graph shows which files directly or indirectly include this file:



Classes

- class Flightplan
 - : Class that represents a flight plan in the simulation

Enumerations

- enum EEvent { kLand, kTakeoff, kNothing }
- 5.6.1 Enumeration Type Documentation
- 5.6.1.1 enum EEvent

enum that indicates an event for the plane

Enumerator

kLand

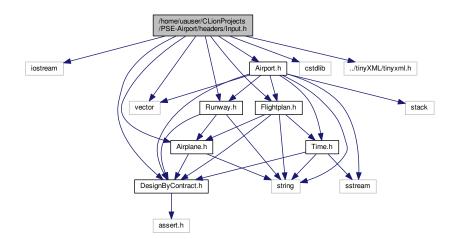
kTakeoff

kNothing

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5.7 /home/uauser/CLionProjects/PSE-Airport/headers/Input.h File Reference

```
#include <iostream>
#include <vector>
#include <cstdlib>
#include "DesignByContract.h"
#include "../tinyXML/tinyxml.h"
#include "Airport.h"
#include "Airplane.h"
#include "Runway.h"
#include "Flightplan.h"
Include dependency graph for Input.h:
```



This graph shows which files directly or indirectly include this file:



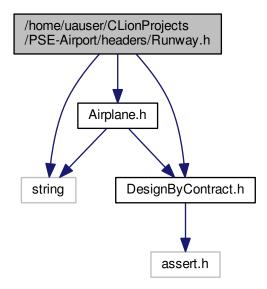
Classes

- · class Input
 - : Class that reads input for the simulation

5.8 /home/uauser/CLionProjects/PSE-Airport/headers/Runway.h File Reference

```
#include <string>
#include "DesignByContract.h"
#include "Airplane.h"
```

Include dependency graph for Runway.h:



This graph shows which files directly or indirectly include this file:



Classes

• class Runway

Enumerations

enum ERunwayType { kAsphalt, kGrass, kDefaultRunType }

5.8.1 Enumeration Type Documentation

5.8.1.1 enum ERunwayType

Enumerator

kAsphalt

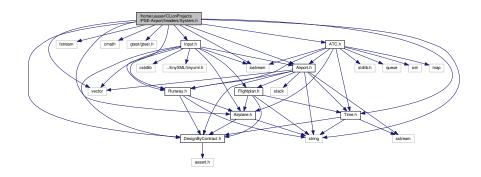
kGrass

kDefaultRunType

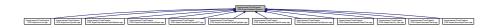
5.9 /home/uauser/CLionProjects/PSE-Airport/headers/System.h File Reference

```
#include <vector>
#include <iostream>
#include <fstream>
#include <string>
#include <cmath>
#include "gtest/gtest.h"
#include "DesignByContract.h"
#include "Airplane.h"
#include "Runway.h"
#include "Input.h"
#include "Time.h"
#include "ATC.h"
```

Include dependency graph for System.h:



This graph shows which files directly or indirectly include this file:



Classes

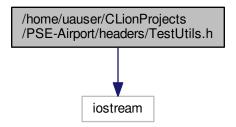
· class System

: Main class, controls the simulation

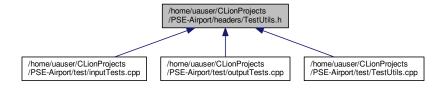
5.10 /home/uauser/CLionProjects/PSE-Airport/headers/TestUtils.h File Reference

#include <iostream>

Include dependency graph for TestUtils.h:



This graph shows which files directly or indirectly include this file:



Functions

- bool DirectoryExists (const std::string dirname)
- bool FileExists (const std::string dirname)
- bool FileIsEmpty (const std::string filename)
- bool FileCompare (const std::string leftFileName, const std::string rightFileName)
- std::string ToString (int i)

5.10.1 Function Documentation

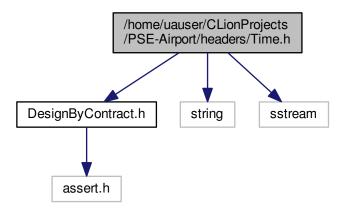
5.10.1.1 bool DirectoryExists (const std::string dirname)

Auxiliary functions for file manipulation.

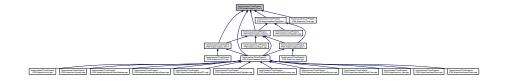
- 5.10.1.2 bool FileCompare (const std::string leftFileName, const std::string rightFileName)
- 5.10.1.3 bool FileExists (const std::string dirname)
- 5.10.1.4 bool FilelsEmpty (const std::string filename)
- 5.10.1.5 std::string ToString (int i)

5.11 /home/uauser/CLionProjects/PSE-Airport/headers/Time.h File Reference

```
#include "DesignByContract.h"
#include <string>
#include <sstream>
Include dependency graph for Time.h:
```



This graph shows which files directly or indirectly include this file:



Classes

• class Time

5.12 /home/uauser/CLionProjects/PSE-Airport/output/ATC.txt File Reference

Variables

- Antwerp Tower
- Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three three
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12← :28][Cessna 842] Cleared ILS approach runway one one romeo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12←:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five thousand
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12← :28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12←:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two[15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in ten

Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12←:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two[15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two[15:37][Cessna 842] Cessna eight four Cessna eight four two at gate one

- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12←:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two[15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two[15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback[15:38][Antwerp Tower] Cessna eight four Antwerp pushback approved[15:39][Cessna 842] Pushback approved
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12↔ :28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two[15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two[15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback[15↔ :38][Antwerp Tower] Cessna eight four Antwerp pushback approved[15:39][Cessna 842] Pushback Cessna eight four two[15:40][Cessna 842] Cessna eight four two is ready to taxi[15:41][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Alpha[15:48][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[15:49][Antwerp Tower] Cessna eight four hold position[15:50][Cessna 842] Holding
- · Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three[12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12← :28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12:36][Cessna 842] Taxi to gate one via Cessna eight four two[15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy[15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two[15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two[15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback[15↔ :38][Antwerp Tower] Cessna eight four Antwerp pushback approved[15:39][Cessna 842] Pushback Cessna eight four two[15:40][Cessna 842] Cessna eight four two is ready to taxi[15:41][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Alpha[15:48][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[15:49][Antwerp Tower] Cessna eight four hold position[15:50][Cessna 842] Holding

Cessna eight four two[15:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[15 ← :52][Antwerp Tower] Cessna eight four runway one one romeo cleared for take off[15:53][Cessna 842] Runway one one romeo cleared for take off

5.12.1 Variable Documentation

- 5.12.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Alpha
- 5.12.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two [15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback [15:38][Antwerp Tower] Cessna eight four Antwerp pushback approved [15:39][Cessna 842] Pushback approved
- 5.12.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.12.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- 5.12.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet

5.12.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one Oessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two [15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback [15:38][Antwerp Tower] Cessna eight four Antwerp pushback approved [15:39][Cessna 842] Pushback Cessna eight four two [15:40][Cessna 842] Cessna eight four two is ready to taxi [15:41][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Alpha [15:48][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [15:49][Antwerp Tower] Cessna eight four hold position [15:50][Cessna 842] Holding Cessna eight four two [15:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [15:52][Antwerp Tower] Cessna eight four runway one one romeo cleared for take off [15:53][Cessna 842] Runway one one romeo cleared for take off

- 5.12.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Gessna eight four two [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two [15:37][Cessna 842] Cessna eight four Cessna eight four two at gate one
- 5.12.1.8 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three [12:17] [Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one Oessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two [15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback [15:38][Antwerp Tower] Cessna eight four Antwerp pushback approved [15:39][Cessna 842] Pushback Cessna eight four two [15:40][Cessna 842] Cessna eight four two is ready to taxi [15:41][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Alpha [15:48][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [15:49][Antwerp Tower] Cessna eight four hold position [15:50][Cessna 842] Holding position

- 5.12.1.9 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one romeo
- 5.12.1.10 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in ten
- 5.12.1.11 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five thousand
- 5.12.1.12 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three three [12:17][Cessna 842] Descend and maintain five thousand squawking one three three
- 5.12.1.13 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one Oessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32] [Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two [15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback [15:38][Antwerp Tower] Cessna eight four Antwerp pushback approved [15:39][Cessna 842] Pushback Cessna eight four two [15:40][Cessna 842] Cessna eight four two is ready to taxi [15:41][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Alpha [15:48][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [15:49][Antwerp Tower] Cessna eight four hold position [15:50][Cessna 842] Holding Cessna eight four two [15:51][Cessna 842] Antwerp Tower

5.12.1.14 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk one three [12:17][Cessna 842] Descend and maintain five thousand squawking one three Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one One Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Cessna eight four two [15:30][Cessna 842] Antwerp Cessna eight four requesting IFR clearancy [15:31][Antwerp Tower] Cessna eight four Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk five one two [15:32][Cessna 842] Cleared to one one initial altitude five expecting one zero zero in squawking five one Cessna eight four two [15:37][Cessna 842] Cessna eight four Cessna eight four two at gate requesting pushback [15:38][Antwerp Tower] Cessna eight four Antwerp pushback approved [15:39][Cessna 842] Pushback Cessna eight four two [15:40][Cessna 842] Cessna eight four two is ready to taxi [15:41][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Alpha [15:48][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [15:49][Antwerp Tower] Cessna eight four hold position [15:50][Cessna 842] Holding Cessna eight four two [15:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [15:52][Antwerp Tower] Cessna eight four two

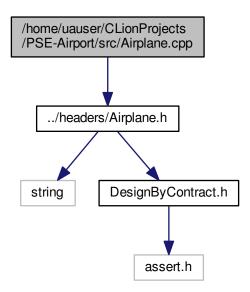
- 5.13 /home/uauser/CLionProjects/PSE-Airport/output/info.txt File Reference
- 5.14 /home/uauser/CLionProjects/PSE-Airport/output/log.txt File Reference
- 5.15 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/log.txt File Reference

Variables

- Antwerp Tower
- Antwerp Cessna
- Antwerp arriving at Antwerp International Airport[12:00][Cessna 842] Descend and maintain five thousand feet
- Antwerp arriving at Antwerp International Airport[12:00][Cessna 842] Descend and maintain five thousand squawking
- 5.15.1 Variable Documentation
- 5.15.1.1 Antwerp Cessna
- 5.15.1.2 Antwerp arriving at Antwerp International Airport [12:00] [Cessna 842] Descend and maintain five thousand feet
- 5.15.1.3 Antwerp arriving at Antwerp International Airport [12:00][Cessna 842] Descend and maintain five thousand squawking
- 5.15.1.4 Antwerp Tower

5.16 /home/uauser/CLionProjects/PSE-Airport/src/Airplane.cpp File Reference

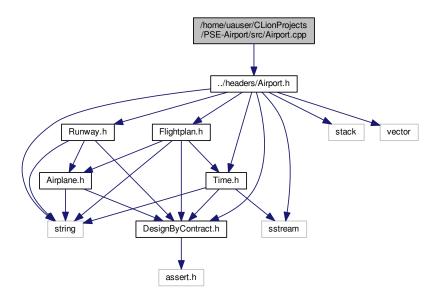
#include "../headers/Airplane.h"
Include dependency graph for Airplane.cpp:



5.17 /home/uauser/CLionProjects/PSE-Airport/src/Airport.cpp File Reference

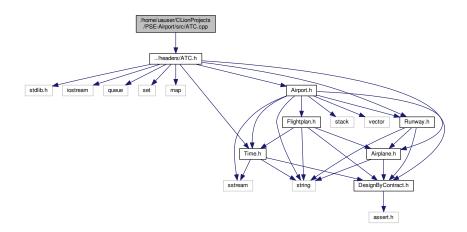
#include "../headers/Airport.h"

Include dependency graph for Airport.cpp:



5.18 /home/uauser/CLionProjects/PSE-Airport/src/ATC.cpp File Reference

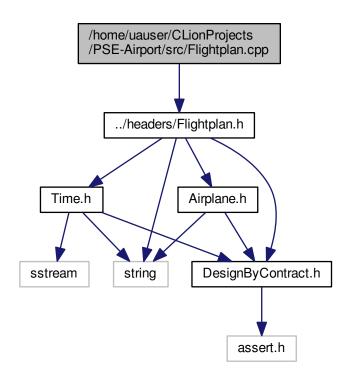
#include "../headers/ATC.h"
Include dependency graph for ATC.cpp:



5.19 /home/uauser/CLionProjects/PSE-Airport/src/Flightplan.cpp File Reference

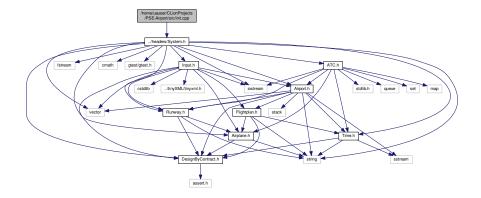
#include "../headers/Flightplan.h"

Include dependency graph for Flightplan.cpp:



5.20 /home/uauser/CLionProjects/PSE-Airport/src/init.cpp File Reference

#include "../headers/System.h"
Include dependency graph for init.cpp:



Macros

• #define ENDTIME Time(16)

- #define INPUTFILENAME "../input.xml"
- #define ATCFILENAME "../output/ATC.txt"
- #define LOGFILENAME "../output/log.txt"

Functions

• int main ()

5.20.1 Macro Definition Documentation

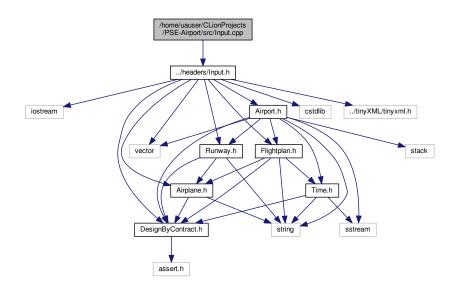
- 5.20.1.1 #define ATCFILENAME "../output/ATC.txt"
- 5.20.1.2 #define ENDTIME Time(16)
- 5.20.1.3 #define INPUTFILENAME "../input.xml"
- 5.20.1.4 #define LOGFILENAME "../output/log.txt"

5.20.2 Function Documentation

5.20.2.1 int main ()

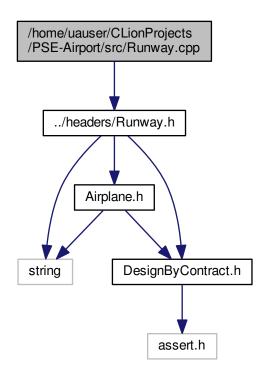
5.21 /home/uauser/CLionProjects/PSE-Airport/src/Input.cpp File Reference

#include "../headers/Input.h"
Include dependency graph for Input.cpp:



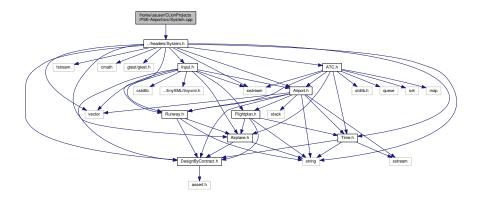
5.22 /home/uauser/CLionProjects/PSE-Airport/src/Runway.cpp File Reference

#include "../headers/Runway.h"
Include dependency graph for Runway.cpp:



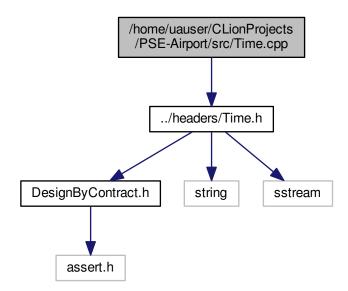
5.23 /home/uauser/CLionProjects/PSE-Airport/src/System.cpp File Reference

#include "../headers/System.h"
Include dependency graph for System.cpp:



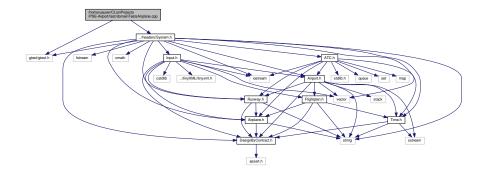
5.24 /home/uauser/CLionProjects/PSE-Airport/src/Time.cpp File Reference

#include "../headers/Time.h"
Include dependency graph for Time.cpp:



5.25 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsAirplane.cpp File Reference

#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsAirplane.cpp:



Classes

• class domainTestAirplane

Functions

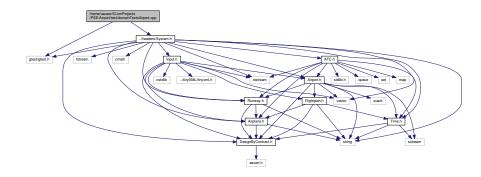
- TEST_F (domainTestAirplane, DefaultConstructor)
- TEST_F (domainTestAirplane, happyDay)
- TEST_F (domainTestAirplane, complete)
- TEST_F (domainTestAirplane, fieldManipulation)
- TEST F (domainTestAirplane, ContractViolations)

5.25.1 Function Documentation

```
5.25.1.1 TEST_F ( domainTestAirplane , DefaultConstructor )
5.25.1.2 TEST_F ( domainTestAirplane , happyDay )
5.25.1.3 TEST_F ( domainTestAirplane , complete )
5.25.1.4 TEST_F ( domainTestAirplane , fieldManipulation )
5.25.1.5 TEST_F ( domainTestAirplane , ContractViolations )
```

5.26 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsAirport.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsAirport.cpp:
```



Classes

· class domainTestAirport

Functions

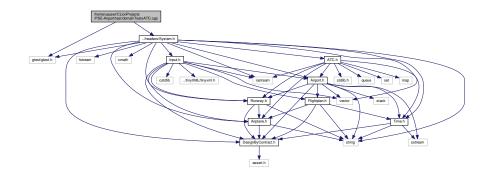
- TEST F (domainTestAirport, DefaultConstructor)
- TEST F (domainTestAirport, happyDay)
- TEST_F (domainTestAirport, complete)
- TEST_F (domainTestAirport, fieldManipulation)
- TEST_F (domainTestAirport, ContractViolations)

5.26.1 Function Documentation

```
5.26.1.1 TEST_F ( domainTestAirport , DefaultConstructor )
5.26.1.2 TEST_F ( domainTestAirport , happyDay )
5.26.1.3 TEST_F ( domainTestAirport , complete )
5.26.1.4 TEST_F ( domainTestAirport , fieldManipulation )
5.26.1.5 TEST_F ( domainTestAirport , ContractViolations )
```

5.27 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsATC.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsATC.cpp:
```



Classes

· class domainTestATC

Functions

- TEST_F (domainTestATC, DefaultConstructor)
- TEST_F (domainTestATC, processApproach)
- TEST_F (domainTestATC, processDescend)
- TEST F (domainTestATC, processTaxiArrival)
- TEST_F (domainTestATC, squawk)
- TEST_F (domainTestATC, processIFRClearance)
- TEST_F (domainTestATC, processPushback)
- TEST_F (domainTestATC, processTaxiInitialise)
- TEST_F (domainTestATC, processTaxiInstruction)
- TEST_F (domainTestATC, processTakeOff)
- TEST_F (domainTestATC, processTakeOffRunway)
- TEST_F (domainTestATC, fieldManipulation)

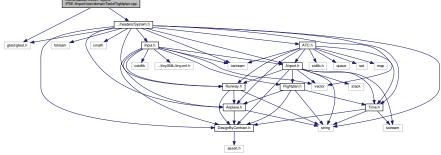
```
5.27.1 Function Documentation
```

```
5.27.1.1 TEST_F ( domainTestATC , DefaultConstructor )
5.27.1.2 TEST_F ( domainTestATC , processApproach )
5.27.1.3 TEST_F ( domainTestATC , processDescend )
5.27.1.4 TEST_F ( domainTestATC , processTaxiArrival )
5.27.1.5 TEST_F ( domainTestATC , squawk )
5.27.1.6 TEST_F ( domainTestATC , processIFRClearance )
5.27.1.7 TEST_F ( domainTestATC , processPushback )
5.27.1.8 TEST_F ( domainTestATC , processTaxiInitialise )
5.27.1.9 TEST_F ( domainTestATC , processTaxiInstruction )
5.27.1.10 TEST_F ( domainTestATC , processTakeOff )
5.27.1.11 TEST_F ( domainTestATC , processTakeOffRunway )
5.27.1.12 TEST_F ( domainTestATC , fieldManipulation )
```

5.28 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsFlightplan.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsFlightplan.cpp:
```

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PSE Appetition committee SE lightplan cgp.



Classes

• class domainTestFlightplan

Functions

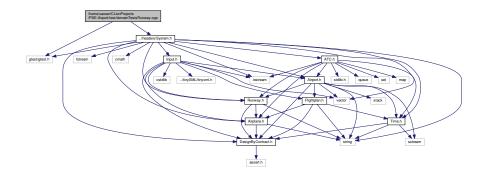
- TEST_F (domainTestFlightplan, defaultConstructor)
- TEST F (domainTestFlightplan, happyDay)
- TEST_F (domainTestFlightplan, fieldManipulation)
- TEST_F (domainTestFlightplan, contractViolations)

5.28.1 Function Documentation

```
5.28.1.1 TEST_F ( domainTestFlightplan , defaultConstructor )
5.28.1.2 TEST_F ( domainTestFlightplan , happyDay )
5.28.1.3 TEST_F ( domainTestFlightplan , fieldManipulation )
5.28.1.4 TEST_F ( domainTestFlightplan , contractViolations )
```

5.29 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsRunway.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsRunway.cpp:
```



Classes

class domainTestRunway

Functions

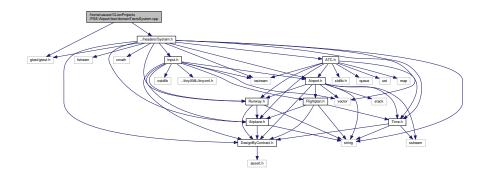
- TEST_F (domainTestRunway, DefaultConstructor)
- TEST_F (domainTestRunway, happyDay)
- TEST_F (domainTestRunway, complete)
- TEST_F (domainTestRunway, fieldManipulation)
- TEST_F (domainTestRunway, ContractViolations)

5.29.1 Function Documentation

```
5.29.1.1 TEST_F ( domainTestRunway , DefaultConstructor )
5.29.1.2 TEST_F ( domainTestRunway , happyDay )
5.29.1.3 TEST_F ( domainTestRunway , complete )
5.29.1.4 TEST_F ( domainTestRunway , fieldManipulation )
5.29.1.5 TEST_F ( domainTestRunway , ContractViolations )
```

5.30 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsSystem.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsSystem.cpp:
```



Classes

class domainTestSystem

Functions

- TEST_F (domainTestSystem, approach)
- TEST_F (domainTestSystem, descend)
- TEST_F (domainTestSystem, circle)
- TEST F (domainTestSystem, taxiArrival)
- TEST_F (domainTestSystem, crossArrival)
- TEST_F (domainTestSystem, deboard)
- TEST_F (domainTestSystem, technicalCheck)
- TEST_F (domainTestSystem, simulationFinished)
- TEST_F (domainTestSystem, import)
- TEST_F (domainTestSystem, ascend)
- TEST_F (domainTestSystem, onRunway)
- TEST_F (domainTestSystem, atRunway)
- TEST F (domainTestSystem, taxiDepartureCross)
- TEST_F (domainTestSystem, taxiDepartureStep)
- TEST F (domainTestSystem, taxiDepartureStart)
- TEST_F (domainTestSystem, pushback)

5.30.1.1 TEST_F (domainTestSystem , approach)

- TEST_F (domainTestSystem, prepare)
- TEST_F (domainTestSystem, fieldManipulation)

5.30.1 Function Documentation

```
5.30.1.2 TEST_F ( domainTestSystem , descend )

5.30.1.3 TEST_F ( domainTestSystem , circle )

5.30.1.4 TEST_F ( domainTestSystem , taxiArrival )

5.30.1.5 TEST_F ( domainTestSystem , crossArrival )

5.30.1.6 TEST_F ( domainTestSystem , deboard )

5.30.1.7 TEST_F ( domainTestSystem , technicalCheck )

5.30.1.8 TEST_F ( domainTestSystem , simulationFinished )

5.30.1.9 TEST_F ( domainTestSystem , import )

5.30.1.10 TEST_F ( domainTestSystem , ascend )

5.30.1.11 TEST_F ( domainTestSystem , onRunway )
```

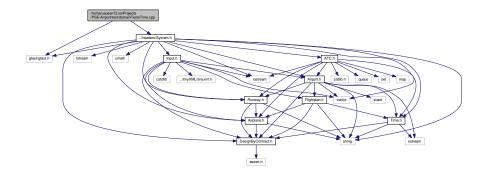
5.30.1.12 TEST_F (domainTestSystem , atRunway)

5.30.1.13 TEST_F (domainTestSystem , taxiDepartureCross)

```
5.30.1.14 TEST_F ( domainTestSystem , taxiDepartureStep )
5.30.1.15 TEST_F ( domainTestSystem , taxiDepartureStart )
5.30.1.16 TEST_F ( domainTestSystem , pushback )
5.30.1.17 TEST_F ( domainTestSystem , prepare )
5.30.1.18 TEST_F ( domainTestSystem , fieldManipulation )
```

5.31 /home/uauser/CLionProjects/PSE-Airport/test/domainTestsTime.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
Include dependency graph for domainTestsTime.cpp:
```



Classes

· class domainTestTime

Functions

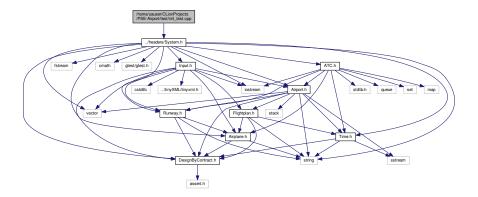
- TEST_F (domainTestTime, constructor)
- TEST_F (domainTestTime, happyDay)
- TEST_F (domainTestTime, operators)
- TEST_F (domainTestTime, contractViolations)

5.31.1 Function Documentation

```
5.31.1.1 TEST_F ( domainTestTime , constructor )
5.31.1.2 TEST_F ( domainTestTime , happyDay )
5.31.1.3 TEST_F ( domainTestTime , operators )
5.31.1.4 TEST_F ( domainTestTime , contractViolations )
```

5.32 /home/uauser/CLionProjects/PSE-Airport/test/init_test.cpp File Reference

#include "../headers/System.h"
Include dependency graph for init_test.cpp:



Functions

• int main (int argc, char **argv)

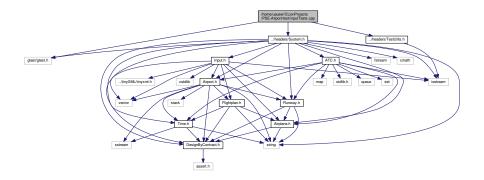
5.32.1 Function Documentation

5.32.1.1 int main (int argc, char ** argv)

5.33 /home/uauser/CLionProjects/PSE-Airport/test/inputTests.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
#include "../headers/TestUtils.h"
```

Include dependency graph for inputTests.cpp:



Classes

class inputTest

Functions

- TEST_F (inputTest, HappyDay)
- TEST_F (inputTest, legalInput)
- TEST_F (inputTest, nonexistentFile)
- TEST_F (inputTest, XMLSyntaxErrors)
- TEST_F (inputTest, illegalAirport)
- TEST_F (inputTest, illegalElement)

5.33.1 Function Documentation

```
5.33.1.1 TEST_F (inputTest, HappyDay)
```

5.33.1.2 TEST_F (inputTest, legalInput)

5.33.1.3 TEST_F (inputTest , nonexistentFile)

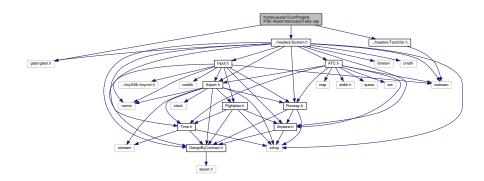
 $5.33.1.4 \quad TEST_F \ (\ input Test \ , \ XMLSyntaxErrors \)$

5.33.1.5 TEST_F (inputTest, illegalAirport)

5.33.1.6 TEST_F (inputTest , illegalElement)

5.34 /home/uauser/CLionProjects/PSE-Airport/test/outputTests.cpp File Reference

```
#include <gtest/gtest.h>
#include "../headers/System.h"
#include "../headers/TestUtils.h"
Include dependency graph for outputTests.cpp:
```



Functions

- TEST (outputTest, happyDay)
- 5.34.1 Function Documentation
- 5.34.1.1 TEST (outputTest , happyDay)

5.35 /home/uauser/CLionProjects/PSE-Airport/test/testInput/error.txt File Reference

Variables

- · Inconsistent taxiroute data
- 5.35.1 Variable Documentation
- 5.35.1.1 Inconsistent taxiroute data
- 5.36 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError1.txt File Reference
- 5.37 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError10.txt File Reference
- 5.38 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError11.txt File Reference

Variables

· Inconsistent taxiroute data

- 5.38.1 Variable Documentation
- 5.38.1.1 Inconsistent taxiroute data
- 5.39 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError12.txt File Reference

Variables

- · Inconsistent taxiroute data
- 5.39.1 Variable Documentation
- 5.39.1.1 Inconsistent taxiroute data
- 5.40 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError2.txt File Reference
- 5.41 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError3.txt File Reference
- 5.42 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError4.txt File Reference
- 5.43 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError5.txt File Reference

Variables

- · Inconsistent taxiroute data
- 5.43.1 Variable Documentation
- 5.43.1.1 Inconsistent taxiroute data
- 5.44 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError6.txt File Reference

Variables

Length field is an invalid value Inconsistent taxiroute data

- 5.44.1 Variable Documentation
- 5.44.1.1 Length field is an invalid value Inconsistent taxiroute data
- 5.45 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError7.txt File Reference
- 5.46 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError8.txt File Reference
- 5.47 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalError9.txt File Reference

Functions

- · Invalid data for Runway status Duplicate or missing field (s) for Runway. Inconsistent taxiroute data
- 5.47.1 Function Documentation
- 5.47.1.1 Invalid data for Runway status Duplicate or missing field (s)
- 5.48 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalSyntax1.txt File Reference
- 5.49 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalSyntax2.txt File Reference
- 5.50 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalSyntax3.txt File Reference
- 5.51 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalSyntax4.txt File Reference
- 5.52 /home/uauser/CLionProjects/PSE-Airport/test/testInput/illegalSyntax5.txt File Reference
- 5.53 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/atc.txt File Reference
- 5.54 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay1ATC.txt File Reference

Variables

Antwerp Tower

- · Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking zero
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12:28][Cessna 842] Cleared ILS approach runway one one romeo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12← :36][Cessna 842] Taxi to gate one via Alpha

5.54.1 Variable Documentation

- 5.54.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Alpha
- 5.54.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.54.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet
- 5.54.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one romeo
- 5.54.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Tower

5.54.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Gessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four two

5.54.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking zero

5.55 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay1ExpectedA TC.txt File Reference

Variables

- · Antwerp Tower
- · Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking zero
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12:28][Cessna 842] Cleared ILS approach runway one one romeo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12←:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated[12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha[12←:36][Cessna 842] Taxi to gate one via Alpha

5.55.1 Variable Documentation

5.55.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four taxi to gate one via Alpha [12:36][Cessna 842] Taxi to gate one via Alpha

- 5.55.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.55.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet
- 5.55.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one romeo
- 5.55.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Tower
- 5.55.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one romeo [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one romeo vacated [12:35][Antwerp Tower] Cessna eight four two
- 5.55.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking zero
- 5.56 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay1Expected
 Info.txt File Reference
- 5.57 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay1Expected
 Log.txt File Reference
- 5.58 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay1Info.txt File Reference
- 5.59 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay1Log.txt File Reference

5.60 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay2ATC.txt File Reference

Variables

- Antwerp Tower
- Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking zero
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one lima
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo[12:36][Cessna 842] Taxi to holding point one one romeo via Bravo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo[12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:43][Antwerp Tower] Cessna eight four cleared to cross one one romeo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo[12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Alpha

- 5.60.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Gessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to gate one via Alpha
- 5.60.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Bravo
- 5.60.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.60.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet
- 5.60.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima [12:28][Cessna 842] Cleared ILS approach runway one one lima
- 5.60.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one romeo
- 5.60.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two [12:42][Cessna 842] Antwerp Tower

5.60.1.8 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:43][Antwerp Tower] Cessna eight four two

5.60.1.9 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking zero

5.61 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay2ExpectedA TC.txt File Reference

Variables

- Antwerp Tower
- · Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking zero
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one lima
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo[12:36][Cessna 842] Taxi to holding point one one romeo via Bravo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo[12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:43][Antwerp Tower] Cessna eight four cleared to cross one one romeo

• Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima[12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one one lima vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo[12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Alpha

5.61.1 Variable Documentation

- 5.61.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to gate one via Alpha
- 5.61.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Bravo
- 5.61.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.61.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet
- 5.61.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one lima [12:28][Cessna 842] Cleared ILS approach runway one one lima

5.61.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one romeo

- 5.61.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two [12:42][Cessna 842] Antwerp Tower
- 5.61.1.8 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one one Iima [12:28][Cessna 842] Cleared ILS approach runway one one Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one one Iima vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one romeo via Bravo [12:36][Cessna 842] Taxi to holding point one one romeo via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:43][Antwerp Tower] Cessna eight four two
- 5.61.1.9 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking zero
- 5.62 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay2Expected
 Info.txt File Reference
- 5.63 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay2Expected
 Log.txt File Reference
- 5.64 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay2Info.txt File Reference
- 5.65 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay2Log.txt File Reference

5.66 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay3ATC.txt File Reference

- Antwerp Tower
- · Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking zero
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two bravo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one lima
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Bravo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Gessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842]

Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two[12:44][Cessna 842] Cleared to cross one one taxi to holding point one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:52][Antwerp Tower] Cessna eight four cleared to cross one one romeo

• Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:52][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Alpha

5.66.1 Variable Documentation

- 5.66.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Gessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Alpha
- 5.66.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two bravo
- 5.66.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima [12:43][Antwerp Tower] Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to holding point one one romeo via Bravo

- 5.66.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one Iima via Charlie [12:36][Cessna 842] Taxi to holding point one one Iima via Charlie
- 5.66.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.66.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet
- 5.66.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one lima
- 5.66.1.8 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross
- 5.66.1.9 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:51][Cessna 842] Antwerp Tower

5.66.1.10 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one Iima via Charlie [12:36][Cessna 842] Taxi to holding point one one Iima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one Iima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four two [12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four two

5.66.1.11 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking zero

5.67 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay3ExpectedA TC.txt File Reference

- Antwerp Tower
- · Antwerp Cessna eight four two
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar contact
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand feet
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking zero
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12 : 27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two bravo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one lima

- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Bravo
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12← :27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:41][Cess
- Antwerp Cessna eight four arriving at Antwerp International Airport[12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero[12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two[12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet[12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two[12←:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo[12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two[12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated[12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie[12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two[12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima[12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo via Cessna eight four two[12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo[12:52][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Alpha

5.67.1 Variable Documentation

5.67.1.1 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Alpha

5.67.1.2 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two bravo

- 5.67.1.3 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one Iima via Charlie [12:36][Cessna 842] Taxi to holding point one one Iima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one Iima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to holding point one one romeo via Bravo
- 5.67.1.4 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Charlie
- 5.67.1.5 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar contact
- 5.67.1.6 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand feet
- 5.67.1.7 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one lima

- 5.67.1.8 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:44][Cessna 842] Cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross one one taxi to gate one via Cessna eight four two [12:53][Cessna 842] Cleared to cross
- 5.67.1.9 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:51][Cessna 842] Antwerp Tower
- 5.67.1.10 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking Cessna eight four two [12:23][Antwerp Tower] Cessna eight four descend and maintain three thousand feet [12:24][Cessna 842] Descend and maintain three thousand Cessna eight four two [12:27][Antwerp Tower] Cessna eight four cleared ILS approach runway one two bravo [12:28][Cessna 842] Cleared ILS approach runway one two Cessna eight four two [12:34][Cessna 842] Antwerp Cessna eight four runway one two bravo vacated [12:35][Antwerp Tower] Cessna eight four taxi to holding point one one lima via Charlie [12:36][Cessna 842] Taxi to holding point one one lima via Cessna eight four two [12:42][Cessna 842] Antwerp Cessna eight four holding short at one one lima [12:43][Antwerp Tower] Cessna eight four cleared to cross one one taxi to holding point one one romeo via Cessna eight four two [12:51][Cessna 842] Antwerp Cessna eight four holding short at one one romeo [12:52][Antwerp Tower] Cessna eight four two
- 5.67.1.11 Antwerp Cessna eight four arriving at Antwerp International Airport [12:16][Antwerp Tower] Cessna eight four radar descend and maintain five thousand squawk zero [12:17][Cessna 842] Descend and maintain five thousand squawking zero
- 5.68 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay3Expected
 Info.txt File Reference
- 5.69 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay3Expected
 Log.txt File Reference
- 5.70 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay3Info.txt File Reference

5.71 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay3Log.txt File Reference

5.72 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay4ATC.txt File Reference

- Antwerp Tower
- Antwerp Speedbird four six six
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one lima
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five thousand
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12-:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking zero
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback approved
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12←:37][Speedbird 466] Cleared to cross one one romeo
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12←:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Bravo
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird

four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12↔ :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six[12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:44][Antwerp Tower] Speedbird four six hold position[12:45][Speedbird 466] Holding position

• Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six[12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:44][Antwerp Tower] Speedbird four six hold position[12:45][Speedbird 466] Holding Speedbird four six six[12:46][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:47][Antwerp Tower] Speedbird four six runway one one lima cleared for take off[12:48][Speedbird 466] Runway one one lima cleared for take off

5.72.1 Variable Documentation

- 5.72.1.1 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback approved
- 5.72.1.2 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Bravo
- 5.72.1.3 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- 5.72.1.4 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one lima

5.72.1.5 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six holding short at one one lima [12:47][Antwerp Tower] Speedbird four six runway one one lima cleared for take off [12:48][Speedbird 466] Runway one one lima cleared for take off

- 5.72.1.6 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- 5.72.1.7 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six hold position [12:45][Speedbird 466] Holding position
- 5.72.1.8 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one romeo
- 5.72.1.9 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six holding short at one one lima [12:47][Antwerp Tower] Speedbird four six holding short at one one lima [12:47][Antwerp Tower] Speedbird four six six
- 5.72.1.10 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten

- 5.72.1.11 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five thousand
- 5.72.1.12 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six hold position [12:45][Speedbird 466] Holding Speedbird four six six [12:46][Speedbird 466] Antwerp Tower
- 5.72.1.13 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one initial altitude five expecting one zero zero in squawking zero

5.73 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay4ExpectedA TC.txt File Reference

- Antwerp Tower
- Antwerp Speedbird four six six
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one lima
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five thousand
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking zero
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird

four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12 \leftrightarrow :37][Speedbird 466] Cleared to cross one one romeo

- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12 ← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12 ← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12 ← :37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Bravo
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six six[12:43][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six[12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:44][Antwerp Tower] Speedbird four six hold position[12:45][Speedbird 466] Holding position
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo[12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo[12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six[12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:44][Antwerp Tower] Speedbird four six hold position[12:45][Speedbird 466] Holding Speedbird four six six[12:46][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:47][Antwerp Tower] Speedbird four six runway one one lima cleared for take off[12:48][Speedbird 466] Runway one one lima cleared for take off

5.73.1 Variable Documentation

- 5.73.1.1 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback approved
- 5.73.1.2 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Bravo

- 5.73.1.3 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- 5.73.1.4 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one lima
- 5.73.1.5 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six holding short at one one lima [12:47][Antwerp Tower] Speedbird four six runway one one lima cleared for take off [12:48][Speedbird 466] Runway one one lima cleared for take off
- 5.73.1.6 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- 5.73.1.7 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six hold position [12:45][Speedbird 466] Holding position
- 5.73.1.8 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one romeo

5.73.1.9 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six holding short at one one lima [12:47][Antwerp Tower] Speedbird four six holding short at one one lima [12:47][Antwerp Tower] Speedbird four six six

- 5.73.1.10 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten
- 5.73.1.11 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five thousand
- 5.73.1.12 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one romeo via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one romeo [12:36][Antwerp Tower] Speedbird four six cleared to cross one one romeo [12:37][Speedbird 466] Cleared to cross one one taxi to holding point one one lima via Speedbird four six six [12:43][Speedbird 466] Antwerp Speedbird four six holding short at one one lima [12:44][Antwerp Tower] Speedbird four six hold position [12:45][Speedbird 466] Holding Speedbird four six six [12:46][Speedbird 466] Antwerp Tower
- 5.73.1.13 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one initial altitude five expecting one zero zero in squawking zero
- 5.74 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay4Expected
 Info.txt File Reference
- 5.75 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay4Expected
 Log.txt File Reference
- 5.76 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay4Info.txt File Reference
- 5.77 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay4Log.txt File Reference

5.78 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay5ATC.txt File Reference

Variables

- Antwerp Tower
- · Antwerp Speedbird four six six
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one lima
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five thousand
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp
 cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking zero
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback approved
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one lima via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:36][Antwerp Tower] Speedbird four six hold position[12:37][Speedbird 466] Holding position
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one lima via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:36][Antwerp Tower] Speedbird four six holding short at one one lima[12:38][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:39][Antwerp Tower] Speedbird four six runway one one lima cleared for take off[12:40][Speedbird 466] Runway one one lima cleared for take off

5.78.1 Variable Documentation

5.78.1.1 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback approved

- 5.78.1.2 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- 5.78.1.3 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one lima
- 5.78.1.4 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one Iima via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:36][Antwerp Tower] Speedbird four six holding short at one one Iima [12:39][Antwerp Tower] Speedbird four six runway one one Iima cleared for take off [12:40][Speedbird 466] Runway one one Iima cleared for take off
- 5.78.1.5 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- 5.78.1.6 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one lima via Alpha [12:35][Speedbird 466] Antwerp Speedbird 466] Holding position
- 5.78.1.7 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one Iima via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:36][Antwerp Tower] Speedbird four six holding short at one one Iima [12:38][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:39][Antwerp Tower] Speedbird four six six
- 5.78.1.8 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten

- 5.78.1.9 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five thousand
- 5.78.1.10 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one Iima via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:36][Antwerp Tower] Speedbird four six hold position [12:37][Speedbird 466] Holding Speedbird four six six [12:38][Speedbird 466] Antwerp Tower
- 5.78.1.11 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one initial altitude five expecting one zero zero in squawking zero

5.79 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay5ExpectedA TC.txt File Reference

- Antwerp Tower
- Antwerp Speedbird four six six
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one lima
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five thousand
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12 \leftarrow :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking zero
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback approved
- Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12←:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12←:23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one lima via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:36][Antwerp Tower] Speedbird four six hold position[12:37][Speedbird 466] Holding position

Antwerp Speedbird four six requesting IFR clearancy[12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero[12← :12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six[12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback[12← :23][Antwerp Tower] Speedbird four six Antwerp pushback approved[12:24][Speedbird 466] Pushback Speedbird four six six[12:27][Speedbird 466] Speedbird four six six is ready to taxi[12:28][Antwerp Tower] Speedbird four six taxi to holding point one one lima via Alpha[12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:36][Antwerp Tower] Speedbird four six holding short at one one lima[12:38][Speedbird 466] Antwerp Speedbird four six holding short at one one lima[12:39][Antwerp Tower] Speedbird four six runway one one lima cleared for take off[12:40][Speedbird 466] Runway one one lima cleared for take off

5.79.1 Variable Documentation

- 5.79.1.1 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback approved
- 5.79.1.2 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after departure
- 5.79.1.3 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

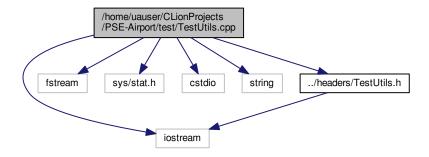
 Cleared to one one lima
- 5.79.1.4 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one Iima via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:36][Antwerp Tower] Speedbird four six holding short at one one Iima [12:39][Antwerp Tower] Speedbird four six holding short at one one Iima [12:39][Antwerp Tower] Speedbird four six runway one one Iima cleared for take off [12:40][Speedbird 466] Runway one one Iima cleared for take off
- 5.79.1.5 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate one
- 5.79.1.6 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one lima via Alpha [12:35][Speedbird 466] Antwerp Speedbird 466] Holding position

- 5.79.1.7 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one Iima via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:36][Antwerp Tower] Speedbird four six holding short at one one Iima [12:39][Antwerp Tower] Speedbird four six six [12:38][Speedbird 466] Antwerp Speedbird four six holding short at one one Iima [12:39][Antwerp Tower] Speedbird four six six
- 5.79.1.8 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in ten
- 5.79.1.9 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466]

 Cleared to one one initial altitude five thousand
- 5.79.1.10 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking Speedbird four six six [12:22][Speedbird 466] Speedbird four six Speedbird four six six at gate requesting pushback [12:23][Antwerp Tower] Speedbird four six Antwerp pushback approved [12:24][Speedbird 466] Pushback Speedbird four six six [12:27][Speedbird 466] Speedbird four six six is ready to taxi [12:28][Antwerp Tower] Speedbird four six taxi to holding point one one Iima via Alpha [12:35][Speedbird 466] Antwerp Speedbird four six holding Speedbird four six six [12:38][Speedbird 466] Holding Speedbird four six six [12:38][Speedbird 466] Antwerp Tower
- 5.79.1.11 Antwerp Speedbird four six requesting IFR clearancy [12:11][Antwerp Tower] Speedbird four six Antwerp cleared to one one maintain five expect flight level one zero zero ten minutes after squawk zero [12:12][Speedbird 466] Cleared to one one initial altitude five expecting one zero zero in squawking zero
- 5.80 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay5Expected
 Info.txt File Reference
- 5.81 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay5Expected
 Log.txt File Reference
- 5.82 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay5Info.txt File Reference
- 5.83 /home/uauser/CLionProjects/PSE-Airport/test/testOutput/happyDay5Log.txt File Reference

5.84 /home/uauser/CLionProjects/PSE-Airport/test/TestUtils.cpp File Reference

```
#include <iostream>
#include <fstream>
#include <sys/stat.h>
#include <cstdio>
#include <string>
#include "../headers/TestUtils.h"
Include dependency graph for TestUtils.cpp:
```



Functions

- bool DirectoryExists (const std::string dirname)
- bool FileExists (const std::string filename)
- bool FileIsEmpty (const std::string filename)
- bool FileCompare (const std::string leftFileName, const std::string rightFileName)
- string ToString (int x)

5.84.1 Function Documentation

5.84.1.1 bool DirectoryExists (const std::string dirname)

Auxiliary functions for file manipulation.

- 5.84.1.2 bool FileCompare (const std::string leftFileName, const std::string rightFileName)
- 5.84.1.3 bool FileExists (const std::string filename)
- 5.84.1.4 bool FileIsEmpty (const std::string filename)
- 5.84.1.5 string ToString (int x)

5.85 /home/uauser/CLionProjects/PSE-Airport/Verdeling.txt File Reference

- Joren Output testing domain Testing DONE Airport DONE Runway DONE System takeoff
- Joren Output testing domain Testing DONE Airport DONE Runway DONE System import ATC splitsen tests zoals system DONE Flightplans for inputfiles

5.85.1 Variable Documentation

5.85.1.1 Joren Output testing domain Testing DONE Airport DONE Runway DONE System import ATC splitsen tests zoals system DONE Flightplans for inputfiles

Initial value:

5.85.1.2 Joren Output testing domain Testing DONE Airport DONE Runway DONE System takeoff

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