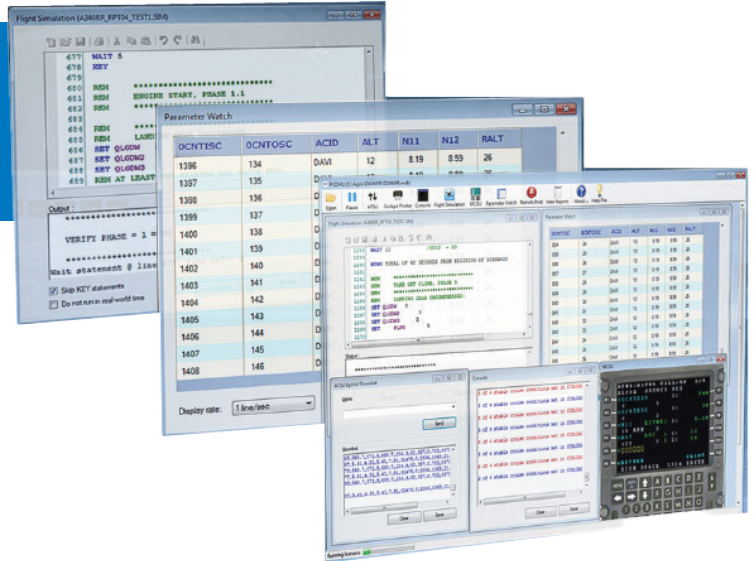


# ACMS Tester™

## Test and Verify ACMS Applications Before Uploading to the Aircraft

Teledyne Controls' ACMS Tester™ is a PC-based solution to test and verify the functionalities of ACMS applications prior to loading them onto a Teledyne data acquisition unit (DMU, iDMU, FDIMU, etc.). Through a highly intuitive and easy-to-use interface, the software simulates the environment of the data acquisition unit, allowing the user to test the customized ACMS applications, and instantly verify the ACMS changes before loading them to the equipment. This solution results in significant time and cost savings.



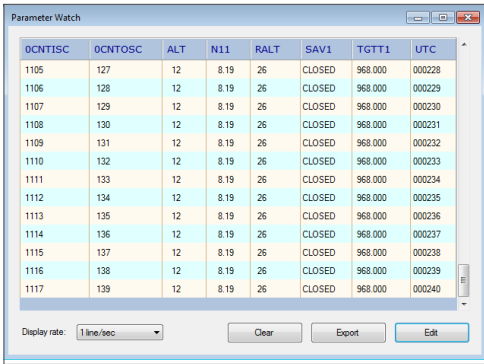
With the ACMS Tester, operators can compose and run scenario files to simulate events, trigger reports, and generate recording files. They can also send uplink commands and navigate through MCDU screens via a user-friendly, Windows-based interface that can create the equivalent of a full ACMS lab test station.

The ACMS Tester relies on ACMS application build files that are generated by the Teledyne AGS IV or AGS95 software tool. In addition, the ACMS Tester depends on the user's PC TSS, (Target System Software), which can be obtained through Teledyne for each of its data acquisition units.

### Key Features:

- A sophisticated tool to instantly verify ACMS changes
- The equivalent of a full ACMS lab test station
- Easy installation on Windows-based PC
- Simulation of real-world flight conditions using scenario files
- Multiple, simultaneous window viewing (MCDU, Printer, Downlinks, etc.)
- Remote print capability at the current flight phase
- Verification of recording maps and report formats
- User-friendly and easy to use

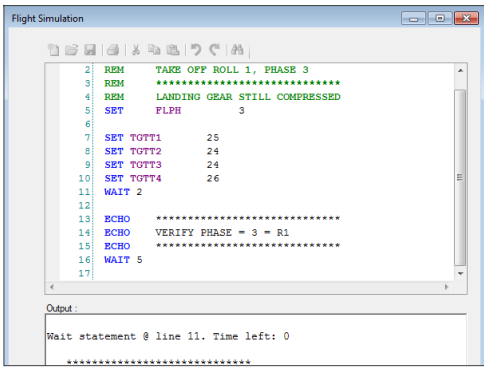
# User Programmability



DCNTISC	DCNTOSC	ALT	N11	RALT	SAV1	TGTT1	UTC
1105	127	12	8.19	26	CLOSED	968.000	000228
1106	128	12	8.19	26	CLOSED	968.000	000229
1107	129	12	8.19	26	CLOSED	968.000	000230
1108	130	12	8.19	26	CLOSED	968.000	000231
1109	131	12	8.19	26	CLOSED	968.000	000232
1110	132	12	8.19	26	CLOSED	968.000	000233
1111	133	12	8.19	26	CLOSED	968.000	000234
1112	134	12	8.19	26	CLOSED	968.000	000235
1113	135	12	8.19	26	CLOSED	968.000	000236
1114	136	12	8.19	26	CLOSED	968.000	000237
1115	137	12	8.19	26	CLOSED	968.000	000238
1116	138	12	8.19	26	CLOSED	968.000	000239
1117	139	12	8.19	26	CLOSED	968.000	000240

## Parameter Watch

Parameter Watch is a debugging tool to view parameters and set stop conditions. The user can export the file and save it as an Excel file. The Clear button clears the screen, but allows the continued monitoring of the parameters. The user may also change the display rate by selecting the rate of his/her choice from the down menu.



```
2 REM TAKE OFF ROLL 1, PHASE 3
3 REM *****
4 REM LANDING GEAR STILL COMPRESSED
5 SET FLPH 3
6
7 SET TOTTT1 25
8 SET TOTTT2 24
9 SET TOTTT3 24
10 SET TOTTT4 26
11 WAIT 2
12
13 ECHO *****
14 ECHO VERIFY PHASE = 3 = R1
15 ECHO *****
16 WAIT 5
17
```

Output:

Wait statement @ line 11. Time left: 0  
\*\*\*\*\*

## Flight Simulation

The Flight Simulation tool allows a user to verify the software functionality of a Data Management Unit (DMU) by simulating real-world flight conditions using scenario files.

The Flight Simulation tool simulates flight profiles by replicating ARINC 429 Digital Information Transfer System (DITS) parameters. It orchestrates the emulation of the hardware complement in real-time, schedules parameter updates, and carries out operator requests and queries.

The Flight Simulation interface contains two windows. The top is the command window, which displays the scenario being run. The bottom is the output window, which displays echo and key statements, as well as time remaining in a wait statement.



## MCDU

The MCDU is the primary display device for the ACMS application and consists of: 12 line select keys (6 left and 6 right), an alphanumeric keypad, function keys, ACMS online help keys, scroll left and right keys, next page/previous page keys, and scratchpad. Select menus may be password-protected, but can still be viewed as read-only.

The MCDU communicates with the Flight Simulation, Cockpit Printer, ATSU/ACARS and Remote Print functions of the ACMS Tester™. MCDU screens will vary between ACMS applications and Units Under Test.