PROGRAM QUIKLOOK II REVISION HISTORY

	Program		Documentation		
Rev.	Revision Date	Revision Name	User Manual (TTS-CC-140) Rev.	Verification Manual (TTS-CC-140.1) Rev.	Revision Description
0	8/20/2004	2004.233	0	0	Original issue

1	12/28/2004 11:41:40 PM Build 2.2.14	2004.363	1	1	Fixed help file so that find time help is active
					If only 1 of 6 Motor Power channels were missing an error occurred
					Calibrate Sensor:
					    - Eliminated need for original graph to be 2 channels
					    - Added combo boxes to select channels
					Fixed error in Channel Swap form
					Fixed error in Calculate Channel - Load Database
					Added rounding of stroke times to 4 decimal places
					Added Lights to running loads - Items Changed:
					    Test Data form
					    Running Loads Dialog on Analysis menu
					    Quiklook.mdb
					    Editing Running loads
					    Editing Standards
					    List Edits
					    Standard Report
					Plot Setup - Fixed resizing form when data is saved
					Board 1 auto zero enabled

2	8/31/2005 8:52:56 PM Build 2.3.22	2005.243	2	2	If user goes from Display Traces trending to Test Data then QUIKLOOK stays in trending mode (fixed) Scroll bars missing from Running Load and Stroke Time dialog (fixed) If test is saved before returning to Acquisition mode then test number does not increment (Reference TTS Error Report 2004.363-1) fixed) Revised procedure for incrementing test number When multiple plots are open Acquisition, Return returns to Acquire mode. Changed to only closes plots Change Close on Graph right-click menu to be same as Return Calculate Channel - channel list missing when in Acquire mode (fixed) If no Reports present Generic report menu is displayed when traces are displayed (fixed) Removed Report menu when Test Listing is active Added Computer Name and Computer ID to Help About for Acquisition Fixed splash screen for large fonts on new laptop Marker List - Click on checkbox to change selected marker Fixed errors caused when trying to display a channel with missing channel file View markers available in basic Acquisition mode Added marker values to Analysis menu Changed default acquisition card to QLII Annotations - Print color matches screen color not print color if Match Color to Trace is selected (fixed)

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Rev.			**Rev.**	**Rev.**	
					Calibration - Apply Cal changed to replace existing trace instead of opening new window If trace selected for cal is not in current window a new window is opened. Allow Zero Cal Trace Changed tab order for Apply Calibration form and changed Enter key to tab between fields Added Trending Mode option to Test Listing form Added check for tests created with a later (incompatible) version of QUIKLOOK and flagged them on the test listing Changed to prevent editing and displaying tests saved by a later major revision of QUIKLOOK Flagged tests which are read-only on the Test Listing Added Plot Setup checks for read-only and disabled controls Added Test Data checks for read-only and disabled controls Cleaned up saves and menus for read-only files Added check for read-only to configuration save Disabled menus while saving to avoid menu clicks causing errors After acquiring a test the value entered for the open TSS is also used for the closed TSS (Reference TTS Error Report 2004.363-2) (fixed) FFT - Move cursor to 1.7 seconds -> Zero trace -> Standard FFT causes error (Reference TTS Error Report 2004.363-3) (fixed) FFT - Custom - Select OK -> Select No -> Menus do not reappear (fixed) Short Report - First time showing short report no selection form shows (fixed) Uncheck Running Loads also turns off lights (fixed) Added Title and prompt to change Title Fixed error creating short report - no privilege for temp files for pictures Added filename length check for overlap in footer of report and shorten if necessary Added Default PDF report names - Use Report name and test ID for filename If Plot Setup was closed without opening Test Data and traces were open then menus did not function properly (fixed) Changes could be made to plot and if plot closed changes were not saved (fixed) If Plot Setup or Test Data are closed without opening the other form all the plots are closed (fixed) Save channel - default is now all checked Removed second prompt Changed QUIKLOOK default to basic version unless preference is checked Plot Setup - If only 1 trace now Single Pane for Y Zooming Added Technician and Type of Test to Test Data Added Data to Acquisition form, Replay Data form and Combine Tests form Small fonts on display and new install crashes QL on Running Loads & Stroke Times form (fixed) Disabled menus on QUIKLOOK startup until after Test Listing shows

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Rev.			**Rev.**	**Rev.**	
					Changed Annotations default: If you choose "y value with prompt" and you are on the thrust trace @ c14, default is "-12,000 (lbs) thrust @ c14" RMS and MPM Autozero function used 1000 points = 60 cycles at 1000 hz and 6 cycles at 10,000 hz. Changed to always use 1 second - 60 cycles. Quiklook.Log created with preference to turn on/off. All tests acquired are logged even if test is not saved. Items Logged: Date, Time, Primary Name, Description, Technician, Seconds, # Channels, Filename, Program Rev, Computer Name, Computer User Differential input with excitation -> Units do not change on Config screen and on Replay - missing mv/v (fixed) Load Config should go to last tag not last test (fixed) Changed to save changes on Windows shutdown Trigger was 32 samples (~2 Cycles). Testing shows that @ 2,000 Hz no problems @ 5,000 Hz Triggers @ 90% Trigger Value @ 10,000 Hz Triggers @ 75% Trigger Value Changed # Trigger Samples to be (Test Frequency/Line Frequency) * 3 Moved save icon next to printer icon in Analysis mode Added different backgrounds for Desktop and Acquisition versions Added Delta Y and Loads to Running Load form Preferences - Changed "Show Test Data Form" to "Advanced Mode" Added check for write privileges for Units and Line Frequency - Disable for no privilege Moved Plot Line Weight preference to Graph Color tab Added Cursor and Marker Line Weight Preference to Graph Color tab Added preference for selecting save channel: Save Test immediately after acquisition Added Create Test Log File Added temp directory for report pictures Added feature that can apply an open and close calibration on a single trace

PROGRAM QUIKLOOK II REVISION HISTORY

	Program		Documentation		
	Revision Date	Revision Name	User Manual (TTS-CC-140)	Verification Manual (TTS-CC-140.1)	Revision Description
Rev.			Rev.	Rev.	
3	9/29/2005 7:05:55 AM Build 2.3.26	2005.272	3	3	Revised to resolve Software error notice 2005.243-1

4	7/12/2006 7:20:37 PM Build 2.3.44	2006.193	4	4	Preferences:
					    Added Preferences for Save Confirm prompt after Acquire
					    Changed Custom Filename mode to include tracking test numbers on a directory basis
					Acquisition:
					    Added Excitation Check using new device
					    Added shortcut keys for Enable & Disable Trigger in Acquire screen
					Configuration:
					    Default Setup checks for a Default.Tag file to use for default before hard coded defaults
					Replay:
					    Changed Test Type "Accidental" to "On Demand"
					Analysis:
					    Adding Standards - Clicking on item selects item
					    Added Motor Power Calculation using Line voltages
					Bug Fixes:
					    Error Notice 2005.272-1 – If Pre & Post Trigger were used & only channels 9 – 16 are used. Multiple Triggers not performed correctly.
					    Error Notice 2005.272-2 – If a previously saved calculated channel is deleted. Then a new calculated channel added and saved. If test is not saved after adding channel then errors may occur during adding markers or saving test. Test files may become corrupt during save.
					    Calibrate Sensor form with missing markers message: fixed form to hide all controls
					    Filespec box on Test Data form shrinks when navigating tests. – Occurs in Windows XP Only
					    Add marker c14 as user marker prompts to add even though it exists in close markers
					    If Alias or Volume & Compression attributes are checked on a file then the test is displayed as read only
					    If a plot is renamed with zoom on marker checked then the new description includes the zoom twice in the description
					    Save ICON doesn't work in Acquire mode (Does not show Disabled if data saved)
					    Move Zero Icon Available in Trending mode with one test shown – Should not be available. Icon removed for trending mode
					Monitor:
					    Test Menus were sometimes disabled when the form was closed.
					    When filename type was not set to default duplicate test numbers might occur.
					    Calculate Channel - Database Link -
					    If a non-text field is selected for the link field then an error occurs. Link field list limited to text fields only
					    Display traces in 2 windows - Zoom in - Locate Marker only moves cursor on one trace

Program			Documentation		
Rev.	**Revision Date**	**Revision Name**	**User Manual (TTS-CC-140)**	**Verification Manual (TTS-CC-140.1)**	**Revision Description**
			Rev.	**Rev.**	
					Combine Test - If save mode is set to C00 & CDB only then save fails on combine test If File -> Preferences selected when Preferences form is already opened an error occurred If File -> Preferences selected when no form is opened then an error occurred Saved Trending Plots - Changed Title did not redisplay
5	9/26/2006 2:31:52 PM Build 2.3.55	2006.269	5	5	Revised to resolve software error notice 2006.193-1

6	10/18/2007 10:45:50 AM Build 2.5.49	2007.291	6	6	Preferences:
					  - Added Preference for Default Tag File Type
					  - Added Preference for Advanced Channel Data Default
					Acquisition:
					  - Added option to display XY graph while acquiring data
					  - Added option to display values above graph while acquiring
					  - Added ability to zero a channel in the monitor screen
					Configuration:
					  - Created new Tag File Type which contains additional setup information including:
					Sensor Information
					Filter, RMS, Calibration & Motor Power Channels
					Default Channels
					  - Predefine Graphs for Acquisition
					  - Added Status bar to display filename
					  - Disabled channels are grayed out
					  - Added Title & Comments
					  - Changed min gauge factor to 1.0
					Replay:
					  - When more then twenty tests are in a directory a progress meter appears while opening test listing
					  - Saved Plots – Added additional features:
					  - Saved Show Markers Setting
					  - Saved Zoom Settings – "Auto Zoom Y",
					"Zoom Mode" & XY Zooms
					  - Saved XY Plots
					  - Saved FFT Plots

7	11/26/2008 11:08:19 AM Build 2.6.53	2008.331	7	7	Preferences
					  - Added Enable AOV
					  - Added Hide MOV Configuration
					  - Added Hide AOV Configuration
					Acquisition:
					  - Added AOV Acquisitin and Control
					  - Monitor Screen - Added Control Signal for AOVs

PROGRAM QUIKLOOK II REVISION HISTORY

	Program		Documentation		
	Revision Date	**Revision Name**	**User Manual (TTS-CC-140)**	**Verification Manual (TTS-CC-140.1)**	**Revision Description**
Rev.			**Rev.**	**Rev.**	

					Configuration:
					    - Added Configure AOV
					    - Added AOV Settings:
					
					                      Control Signal
					                      Wave Form
					                      Valve Properties
					                      Channel Definition
					Replay
					    - Added AOV Info tab for AOV valves
					    - Added AOV Plots to Generic Plots
					                      Mechanical Properties
					                      Overall Calibration
					                      Positioner Calibration
					                      Transducer Calibration
					Analysis
					    - Added AOV Analysis
					                      Valve Properties
					                      Standard AOV Plots
					                      Calculate Markers
					                      AOV Results
					Reports
					    - Added Standard AOV Report
					    Toolbar
					    - Added Buttons for Standard AOV Plots
					Replay
					    - Added Delete All Markers function
					Trace
					    -Added Next Marker & Previous Marker functions
					    -Added ability to scroll in marker list with keyboard
					Analysis
					    -Average Running Load Event
					          '- Added option for min & max values during running load
					Bug Fixes:
					    Error Notice 2007.291-1 - When a tag file was read in then saved as a ctg file an error occurred.
					    Export to ASCII did not work to export between markers.
					    Disabled channel info was not maintained after test so if channels were re-enabled then sensitivities were wrong

8	11/18/2009 4:07:12 PM Build 2.7.35	2009.322	8	8	Preferences
					    - Added AOV Preferences
					                      Show Friction by Default
					                      # Panes on Time Plot
					                      Trace Colors for AOV Plots

PROGRAM QUIKLOOK II REVISION HISTORY

Rev.	Program Revision Date	Revision Name	Documentation User Manual (TTS-CC-140) Rev.	Verification Manual (TTS-CC-140.1) Rev.	Revision Description

					Default Trace to Display after Acquisition
					Default Acquisition Rate
					Automatically Calc Markers after
					Security for Preferences & QUIKLOOK Customization File
					Acquisition
					   - Added Preference for Showing Over Ranging
					   - Preference for Error File Location
					   - Preference to Save Only CDB file
					   - Preference for Find Test (C00 or CDB)
					   - Preference to Allow Dragging and Dropping of Markers
					   - Added option to use new Validyne Board
					   - Turn Channels On & Off in Monitor Screen
					Configuration
					   - Added Over Ranging field to turn off Over Ranging for only selected channels
					Replay
					   - Added Analyst Field to Test Data
					   - Added Acquisition Board Manufacturer Field to Test Data
					   - Replay Tests with Only CDB File
					   - Changed Test Listing to distinguish between Calibrations and Spring Pack Calibrations
					Trace
					   - After entering new marker -> Prompt to add to database -> Cancel -> Add new prompt to not add marker
					   - Added Ability to Drag & Drop Markers - Restricted to Zoom Levels < 0.5 seconds
					Analysis
					   - Partial Motor Power calcs performed. If only Va & Ia then all MVM calcs for Phase A are calculated
					Utilities
					None
					Reports
					   - Modified Spring Pack Calibration Report to use the same Sensor Database as QUIKLOOK
					Toolbar
					None
					Bug Fixes
					Reports did not show up properly in acquisition mode
					After closing report QUIKLOOK did not always return to the top.
					AOV Calculations for Metric Units are fixed

9	4/6/2010 11:34:20 AM Build 2.7.38	2010.96	8	9	Revised to resolve software error notice 2009.322-1

PROGRAM QUIKLOOK II REVISION HISTORY

	Program		Documentation		
	Revision Date	Revision Name	User Manual (TTS-CC-140)	Verification Manual (TTS-CC-140.1)	Revision Description
Rev.			Rev.	Rev.	

10	8/15/2010
	
	1:12:38 PM
	
	Build 2.8.33
		2010.227	9	10	Acquisition - New Features
					    - XY plots in preview screen needs more points. On long tests curve would start disappearing.
					    - After Start is clicked set AOV control signal to initial value and prompt to click to continue when valve is in position
					    - For AOV tests instead of showing text boxes above show channel values (similar to monitor screen) and also include test time, elapsed time & time remaining in bigger font to read from a distance.
					    - Disable RMS option for acquisition rate less than 1000 Hz.
					    - Add Calibration Setting for 5v excitation for Validyne Board
					Acquisition - Bug Fixes
					
					    - If Display Time or TSS were changed during acquisition and a non numeric value was entered then an error occurred. Fields are locked during acquisition.
					    - Changing comments when test is running didn't save comments if test timed out and another field was not clicked
					    - If Regional Settings are changed while acquiring tests then duplicate filenames may occur.
					    Error Notice 2010.96.1: Triggering did not work with Validyne board
					QUIKLOOK.log
					                Replace commas in Technician with -
					            Put in entry for each time QUIKLOOK restarts
					            Put Test No in Log Entry Next to date & time.
					                Time in log file did not match test time.
					Monitor - New Features
					    AOV Control Panel
					    - Add three custom set buttons to go to (ex. 3.1, 9.0 & 14.9)
					    - Have box to enter value to go to.
					    - Hold after test -> Hold Exiting Monitor screen.
					
					    - Monitor - Change to click on slider moves 0.01, first button 0.1 last button 1.0
					    - Change Hot Keys. -> 0.01, Shift -> 0.1, Alt -> 1.0. Ctrl & Shift keys too close and Ctrl key can be pressed by mistake.
					    - Use arrow keys to move slider when anything is active
					Preferences - Bug Fixes
					            Setting Preference for Tag Files does not see ctg files
					Test Data - New Features
					              Ability to change valve data from AOV Info tab

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	Revision Date	Revision Name	User Manual (TTS-CC-140)	Verification Manual (TTS-CC-140.1)	Revision Description
Rev.			Rev.	Rev.	
					Configuration - New Features

Configuration - New Features
- Save Custom Wave Forms to Library
- Calc String Pot Sensitivity for rotary valve
- Test Type (Waveform) should go in Title not Description.
- During custom wave form highlight step being edited bold - color changed to red
- Waveform ramp limited to 500 seconds. Changed to if > 600 sec (10 min) prompt "Are you sure?".
- Change default cfg
- Add System Data Form with M&TE field so that user can enter M&TE number. Add save as default for M&TE #. Not available in desktop config.
- Add Drop Test - 1 sec at max psi, wait prompt, 2 minute test (user selectable) at min psi.
- Resolution & Response - Specify Starting point of trace (Defaults to center of control signal)
- Frequency Response - Add option for # Cycles
- Add Calibration Test - Specify Min, Max Over & Under
- Add Sensitivity test - opposite resolution test. Stops at finest positioner motion resolution.
- Add HDRL Test - 2 Strokes (5 - 95%)
- Add Customization option to select which tests appear in Wave Form Selection

Configuration - Bug Fixes
- Tab order does not go from Title to Description
- Channel Data - Inactive Channel - Sensor info not disabled.
- Desktop 4 - 20 current can not change to 0 - 24
- Desktop Config - Start w MOV Test -> Configuration screen -> Change to AOV Test -> AOV Settings -> Change Max Output -> Divide by Zero Error
- Change from MOV to AOV test type does not reset channels
- EDF - QSS Sensitivity - Change diameter from m to mm.
- Modulus missing 10^6 from form.
- MPA^2 on report - remove ^2
- Disable an AOV Channel then Re enable the channel will no longer be selected in the AOV Settings - Channels.
- Changed Configure Test Form from Fixed Dialog to Fixed Single to fix problem on Citrix of config screen covering both monitors.

Replay - New Features
- Overlay tests from different directories
- Add AOV calculated channels to Plot Setup
- Ability to trend Friction
- Ability to change lines to dots or triangles
- Multiple Monitors - Ensure that popup windows occur on same monitor
- Add Drop Test Plot with calculated pressure drop

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Rev.			Rev.	Rev.		

						Replay - Bug Fixes
						  - Save plot settings does not save position of benchset annotation
						  - Mechanical Properties does not show status bar info
						  - Rotary plots - changing position units from in -> deg does not change cal plot until QL is restarted.
						Trace - New Features
						  - Export To Excel AOV
						Trace - Bug Fixes
						  -Try to add a new marker to QUIKLOOK.mdb from adding to trace and the database is read only an error occurs. Modified so if it is read only then you are not prompted to add.
						  - Check Export to Excel with Office 2007
						Analysis - New Features
						  - Variable Moment Arm -> Link & Lever, Scotch Yoke, Rack & Pinion & Pivoting
						  - Incorporate into Friction & Seat load calcs
						  - Variable Actuator Area - Add Area Retracted & Area Extended
						  - Incorporate into Friction & Spring Rate calcs
						  - Update Spring Rate Calc. Spring Rate is based on actuator load versus actuator position.
						  - For valves with variable area - Area x pressure curve is used
						  - Double acting - incorporate different top & bottom areas and actual actuator displacement
						  - Rotary valve spring rates changed to lbs/in of travel of piston from lbs/deg
						  - Ability to Save AOV Calculated Channels - Added to AOV menu
						  - Ability to trend Friction
						  - Added AOV Channels to Calculate Channel
						  - Calc of net pressure can be flipped. Bottom Cylinder pressure is positive & Top Cylinder is negative
						  - Drop Test - put in 2 markers and calc delta y for pressure drop.
						Analysis - Bug Fixes
						  - Analysis menu - Discard & Save Changes not disabled with no changes.
						  - Reverse Acting Positioner analysis incorrect:
						  - Air to open should be diaphragm (See sample Test - 3-LCV-06-83B)
						  - I/P output increase -> diaphragm pressure decreases
						  - Diaphragm Pressure, Position & I/P Output - Increasing assumed to be first half of curve - Incorrect
						  - Mechanical Properties - Go to customize - scroll annotations - QL crashes - Invalid row number
						  - Spring Rate calculation changed slightly to account for noise.
						  - Auto marking calculation changed slightly to account for noise
						QLUtilitySensor - Bug Fixes
						  - Added support for new Validyne Board
						QLUtilityBackup - Bug Fixes
						  - Does not recognize cdb only tests - Fixed
						  - Copied tests show with test Info missing - Fixed