ACATS Modification List for ACATS 4.1

Version 4.1F December 22, 2017

What is this?

This is the ACATS modification list for ACATS 4.1. This document includes test corrections, test removals, and new tests for ACATS 4.1. ACATS 4.1 is the current test suite for Ada, covering the third edition of Ada, ISO/IEC 8652:2012 (usually known as "Ada 2012").

ACATS Modification List version 3.1Q for ACATS 3.1 is the current list for that test suite. ACATS 3.1 should be used for testing implementations that support Amendment 1 (ISO/IEC 8652:1995/AMD 1:2007, often known as "Ada 2005"), and will continue to be maintained as necessary for the foreseeable future.

ACATS Modification List version 2.6F for ACATS 2.6 is the current list for that test suite. ACATS 2.6 should be used for testing implementations of the second edition of Ada, ISO/IEC 8652:1995 (usually known as "Ada 95"); it also will continue to be maintained as necessary for the foreseeable future.

Changes from the last list:

A number of tests changed status on October 1st; see the lists for the details.

B457001 contains many overlong lines.

B457004 contains two errors: correct code mistakenly marked as an error, and a misspelled object name.

New test B458001 checks that parentheses are required around a quantified expression if the context does not provide them on both sides.

B611007 contains two violations of a new rule introduced by AI12-0166-1. As this is an Ada 2020 rule, we don't want to require it be enforced, but as the AI is a Binding Interpretation (a language correction), we also don't want to it to *not* be enforced in Ada 2012 compilers.

B680001 contains a reference to A @141, but the local declaration of the enclosing expression function does not declare an A.

C452002 reports an incorrect test number when executed.

CC51010 had a main subprogram name that did not follow the rules laid out in the ACATS User's Guide, clause 4.3.3.

New tests posted between October 1, 2017 and December 31, 2017 will become required for conformity assessments on July 1, 2018. New tests posted between July 1, 2017 and September 30, 2017 will become required for conformity assessments on April 1, 2018. New tests posted between April 1, 2017 and June 30, 2017 will become required for conformity assessments on January 1, 2018. New tests posted before April 1, 2017 are required for conformity assessments. The effective dates of tests are marked in the lists.

Questions about this document? Contact the ACAA Technical Agent at agent@ada-auth.org.

ACATS 4.1 includes optional Test Grading tools

ACATS 4.1 introduces new test grading tools.

When the ACATS was designed (as the ACVC in the early 1980s), the intention always was that running it would give a simple and clear Pass or Fail result. However, grading of tests (particularly of B and L Tests) is somewhat subjective and very time-consuming. (Test grading typically involved poring over compiler listings of the entire ACATS with a large highlighter.) The subjectivity was acceptable in the days of common formal testing, as the formal testers would enforce a common grading standard (even if no one could describe what that was), but in an age of self-testing, it reduces the value of the ACATS.

As such, we're introducing a long-overdue set of automated grading tools. These tools are intended to:

- Greatly reduce the effort to grade an ACATS test run (and, hopefully to reduce the cost of formal testing to make it a more practical option);
- Ensure that all users of the ACATS grade tests in the same way, thus making it more valid to compare ACATS results between different implementations and different testers;
- Give implementers certainty as to whether a particular test result is passing (whether the location of an error is "close enough" to the canonical position);
- Be able to detect process errors (especially errors of omission) that is, tests improperly run (for
 instance, files compiled in the wrong order where the ACATS requires an order), or not run at all
 (if one is checking off lines in a listing, it's hard to notice that some test or portion of a test is
 missing).

The tools also will optionally give feedback to implementers about quality of error message positioning and of error cascades (does one error generate multiple messages?). (Since "goodness of an implementation" is not something that the ACATS tests for, this is not an official goal for the tools.)

This is an ambitious set of goals. It's unlikely that they'll be completely met by the initial versions of the tools. As such, their use will be completely optional (but encouraged!) for ACATS 4.1. The tools will be updated periodically by the normal process for updating the ACATS — an ACATS Modification List like this one.

Details on the operation of the tools can be found in the ACATS 4.1 documentation (that documentation can be found at http://www.ada-auth.org/acats-files/4.1/docs/UG-6.HTM). As always, if you have questions, contact the ACAA Technical Agent at agent@ada-auth.org.

Notice:

The ACAA has created and maintains the Ada Conformity Assessment Test Suite for the purpose of conformity assessments conducted in accordance with the International Standard ISO/IEC 18009 - Ada: Conformity assessment of a language processor. This test suite should not be used to make claims of conformance unless used in accordance with ISO/IEC 18009 and any applicable ACAA procedures.

List explanation:

Test numbers given are for the basic test. Categories are "Withdrawn" (the test should not be processed for Ada conformity assessments); "Allowed Modification" (either the original test or the modified one should be processed for Ada conformity assessments); "Modified" (the modified test must be processed for Ada conformity assessments); "Pending New" (the test does not need to be processed for Ada conformity assessments, but will be added in the future); "New" (the test is processed for Ada conformity assessments).

ACATS version labels are provided with all new and modified tests. Use this label to retrieve the test from the ACATS VCS. See "How to get new and modified tests".

In citations, line numbers are given relative to the start of a test file in the format of '@<line#,line#,...>'; if a test program comprises more than one file, then the particular file will be indicated by "fn", where "n" is the test-program name's file-designator numeral. E.g., "B38103E: @f1-31, ... " denotes test file b38103e1.ada. In cases where there are two or more rationales for different errors in a test program, these different rationales with their respective line citations are listed on separate lines. References to the Ada standards are given in the format:

These references are to the consolidated Ada standard as available at http://www.ada-auth.org/standards/rm12 w tc1/html/RM-TOC.html.

Main list:

==== Core Language =====

Name Category Version label (effective date; old version label) Short description.

C350001 [New] VCS Label: A4_1D Check that the object form of the Image attribute is implemented.

C352001 [Modified] VCS Label: A4_1D Corrected Failed message @267 to reflect intended result.

B354002 [New] VCS Label: A4_1D

Test basic requirements for the Mod attribute.

C354004 [New] VCS Label: A4_1D

Test basic operation of the Mod attribute.

B35A001 [New] VCS Label: A4_1D Check Legality Rules are enforced when Small is specified by an aspect specification.

C35A001 [New] VCS Label: A4_1D Check that Small can be specified by an aspect specification.

B38003D [Modified] VCS Label: A4_1A Corrected error tags @70,76,82,88 so "optional" and "error" are on the same line, as required by the test standards.

C3A0030 [New] VCS Label: A4_1A

Check that an access discriminant is only null excluding if it includes a null exclusion.

B3A1001 [Modified] VCS Label: A4_1A Split Pack6 so possible error sets don't intersect; fixed overlong lines.

B3A1002 [Modified] VCS Label: A4_1A Split Pack6 so possible error sets don't intersect; fixed overlong lines.

C452002 [New] VCS Label: A4_1D Check that overloading resolution of Ada 2012 membership operations works as intended.

C452002 [Allowed Modification] New VCS Label: A4_1F Org VCS Label: A4_1D

Required after 2018-04-01 Fixed incorrect test number passed to Report.

- C453001 [New] VCS Label: A4_1D Check that modular adding operators wrap around rather than raising Constraint Error.
- B455002 [Modified] VCS Label: A4_1A Corrected casing of error tags and fixed overlong lines.
- B457001 [Allowed Modification] New VCS Label: A4_1F Org VCS Label: A4_1 Required after 2018-04-01 Fixed overlong lines. Added location indicators.
- B457004 [Allowed Modification] New VCS Label: A4_1F Org VCS Label: A4_1 Required after 2018-04-01

 There should not be an ERROR tag @282; Single_Highest @290 should be Single High. Added location indicators.
- B458001 [Pending New] New VCS Label: A4_1F
 Required after 2018-07-01
 Check that Constraint_Error is raised appropriately when converting access-to-classwide to another access type.
- C460014 [New] VCS Label: A4_1C

 Check that Constraint_Error is raised appropriately when converting access-to-classwide to another access type.
- C460015 [New] VCS Label: A4_1C

 Check that Constraint_Error is raised appropriately when converting access-to-limited-classwide to another access type.
- B470001 [New] VCS Label: A4_1D Check that qualified expressions are a constant view of the expression, even if the expression is a variable object.
- C470001 [New] VCS Label: A4_1D

 Check that qualified expressions are a name, and thus can be used as a prefix and other places a name is required.
- C480001 [New] VCS Label: A4_1D

 [VCS Label A4_1A] Check that an initialized allocator for a class-wide type does an accessibility check on the tag of the initializing object.

 [VCS Label A4_1D] Changed mode to "in" (instead of "in out") @103 & 144 as those parameters are used in functions, making that an Ada 2012 feature, and this is an Ada 2005 test.
- C52101A [Modified] VCS Label: A4_1A Corrected comment @49 not to have the form of an error tag.
- B611001 [New] VCS Label: A4_1A

 Check that Pre and Post are only allowed on subprograms and entries (and not on subprogram instances).
- B611002 [New] VCS Label: A4_1C [VCS Label A4_1A] Check that Pre and Post are not allowed on

subprograms acting as completions.
[VCS Label A4 1C] Corrected several error location codes.

- B611003 [New] VCS Label: A4_1A Check that Pre'Class and Post'Class are only allowed on primitive subprograms of tagged types. (Normal tagged types and interfaces.)
- B611004 [New] VCS Label: A4_1A Check that Pre'Class and Post'Class are not allowed on subprograms acting as completions.
- B611005 [New] VCS Label: A4_1A

 Check that Pre and Post are not allowed on abstract subprograms and null procedures.
- B611006 [New] VCS Label: A4_1C

 [VCS Label A4_1A] Check that the restrictions on Pre'Class and Post'Class expressions added by AI12-0113-1 are enforced.

 [VCS Label A4_1C] Clarified error @208; changed error @233 & @247 to OK (as the inherited Proc4 routine is abstract and thus is not subject to the new rule).
- B611007 [New] VCS Label: A4_1A Check that Pre'Class and Post'Class are not allowed on entries and protected subprograms of untagged task and protected types.
- B611007 [Allowed Modification] New VCS Label: A4_1F Org VCS Label: A4_1A Required after 2018-04-01 Corrected preconditions @77 and @110 not to violate the new rule added by Binding Interpretation AI12-0166-1.
- B611008 [New] VCS Label: A4_1A

 Check various rules about the use of the Result attribute.
- B611009 [New] VCS Label: A4_1A Check that F'Result is not allowed in the body of F.
- B611010 [New] VCS Label: A4_1A Check that the Old attribute is not allowed in a subprogram or entry body, or in an accept statement.
- B611011 [New] VCS Label: A4_1A Check the Old attribute cannot be used within a precondition expression nor in a generic specification outside of a postcondition expression.
- B611012 [New] VCS Label: A4_1A Check that the prefix of an Old attribute cannot contain the Result attribute, another Old attribute, nor the index of a quantified expression.
- B611013 [New] VCS Label: A4_1A For a discrete X, check that X'Old has the nominal subtype of X.
- B611014 [New] VCS Label: A4_1C
 [VCS Label A4_1B] If an Old attribute reference occurs in at a place where it is potentially unevaluated, check that the prefix

must statically denote an object.

[VCS Label A4 1C] Corrected error location codes @240 and @252.

B611015 [New] VCS Label: A4 1B

Check that the prefix of an Old attribute cannot have a limited type.

B611016 [New] VCS Label: A4 1B

Check that tagged tas \overline{k} and tagged protected types do not allow Pre'Class and Post'Class, nor are they allowed on operations of those types.

B611017 [New] VCS Label: A4 1C

[VCS Label A4_1B] Check that Pre'Class cannot be specified for an overriding of a subprogram that does not specify Pre'Class. [VCS Label A4_1C] Declaration of New_Proc @358 is not overriding and thus not subject to the rule. The declaration of Shine @149 never overrides primitives of the actual type by 12.3(18), thus this rule does not apply to instances of Gen2. Added an example using a generic derived type.

B611018 [New] VCS Label: A4 1C

[VCS Label A4 1B] Check 6.1.1(10-16/3).

[VCS Label A4 $^-$ 1C] Type T08 @230 and @241 needs to be declared abstract.

B611019 [New] VCS Label: A4 1C

[VCS Label A4 1B] Check 6.1.1(17/3).

[VCS Label A4 1C] The declaration of Get Count @112

never overrides primitives of the actual type by 12.3(18), thus this rule does not apply to instances of Gen2. Added examples using generic derived types.

C611A01 [New] VCS Label: A4 1A

Check that preconditions and postconditions where both specific and class-wide contracts apply are checked properly.

C611A02 [New] VCS Label: A4 1C

[VCS Label A4_1A] Check that the correct expressions are evaluated for specific preconditions and postconditions, and that they are evaluated at the correct point.

[VCS Label A4_1C] The main subprogram name was corrected to follow the rules of the ACATS User's Guide, clause 4.3.3.

C611A03 [New] VCS Label: A4 1C

[VCS Label A4_1A] Check that the correct expressions are evaluated for class-wide preconditions and postconditions, and that they are evaluated at the correct point.

[VCS Label $A4_1C$] The main subprogram name was corrected to follow the rules of the ACATS User's Guide, clause 4.3.3.

C611A04 [New] VCS Label: A4 1D

[VCS Label A4_1C] Check that the correct expressions are evaluated for class-wide preconditions and postconditions of an interface type, and that they are evaluated at the correct point.
[VCS Label A4 1D] Fixed overlong lines.

- C611B01 [New] VCS Label: A4 1C
 - [VCS Label A4_1A] Check that X'Old has the tag of X and not the tag of the nominal subtype of X (for Post).

[VCS Label A4_1C] The main subprogram name was corrected to follow the rules of the ACATS User's Guide, clause 4.3.3.

- C611B02 [New] VCS Label: A4 1C
 - [VCS Label A4_1A] Check that X'Old has the tag of X and not the tag of the nominal subtype of X (for Post'Class).

[VCS Label A4_1C] The main subprogram name was corrected to follow the rules of the ACATS User's Guide, clause 4.3.3.

- C611B03 [New] VCS Label: A4 1D
 - [VCS Label A4_1C] Check that X'Old has the tag of X and not the tag of the nominal subtype of X (for Post'Class of an interface type).

[VCS Label A4 1D] Fixed overlong lines.

B62001C [Modified] VCS Label: A4 1A

Changed error @35 to be optional, as the syntax error @33 is required (and the comment that only one error need be detected is bogus).

B62001D [Modified] VCS Label: A4 1A

Changed error @41 to be optional, as the syntax error @33 is required (and the comment that only one error need be detected is bogus).

B65005A [Modified] VCS Label: A4 1D

Added additional error locations to directly support common error reporting strategies.

B65005B [Modified] VCS Label: A4 1D

Added additional error locations to directly support common error reporting strategies.

C650B04 [New] VCS Label: A4_1A

Check that the result of a function that returns a class-wide tagged type does an accessibility check on the tag of the result object when the result expression is class-wide.

B651001 [New] VCS Label: A4 1D

Check that a return statement cannot apply to a nonreturning procedure, and that a renames-as-body of a nonreturning procedure has to be a nonreturning procedure (pragma No Return version).

C651001 [New] VCS Label: A4 1D

Check that a nonreturning procedure can raise an exception and raises $Program_Error$ otherwise (pragma No_Return version).

B651002 [New] VCS Label: A4 1D

Check that a return statement cannot apply to a nonreturning procedure, and that a renames-as-body of a nonreturning procedure has to be a nonreturning procedure (aspect No Return version).

C651002 [New] VCS Label: A4 1D

Check that a nonreturning procedure can raise an exception and

raises Program Error otherwise (aspect No Return version).

B651003 [New] VCS Label: A4 1D

Check that an aspect No_Return can only be given on a procedure or generic procedure, that the expression has to be nonstatic, and that the aspect is not given on an instance or null procedure.

B680001 [Allowed Modification] New VCS Label: A4_1F Org VCS Label: A4_1 Required after 2018-04-01

The immediately enclosing expression function @140 does not declare a parameter A, but A is used @141. Added location indicators.

B730006 [Modified] VCS Label: A4_1C

Corrected format of error tags; added location indicators.

B730011 [New] VCS Label: A4 1C

Test various rules about completions of private types and extensions; replaces test B74001A.

B730012 [New] VCS Label: A4 1C

Test various rules about completions of private types and extensions in generic units; replaces test B74001B.

B730013 [New] VCS Label: A4 1D

Test operations available for a private type; replaces test B74203E.

B73001A [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

B73001B [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

B73001C [Modified] VCS Label: A4_1C

Added additional error locations to directly support common error reporting strategies.

B73001D [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

B73001E [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

B73001F [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

B73001G [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

B73001H [Modified] VCS Label: A4 1C

Added additional error locations to directly support common error reporting strategies.

- B740003 [Modified] VCS Label: A4_1A Modified criteria @75 so that it doesn't look like an error tag to the grading tools; also fixed an overlong line.
- B74001A [Withdrawn] VCS Label: A4_1C Replaced by B730011.
- B74001B [Withdrawn] VCS Label: A4_1C Replaced by B730012.
- B74203E [Withdrawn] VCS Label: A4_1D Replaced by B730013.
- B750A07 [New] VCS Label: A4_1A

 Check that only legal expressions are allowed
 in the return expression of an expression function that returns a
 limited type.
- B83F02C [Modified] VCS Label: A4_1A Updated many optional error markers to match ACATS standards.
- B91003A [Modified] VCS Label: A4_1C
 Added additional error locations to directly support common error reporting strategies.
- B91003B [Modified] VCS Label: A4_1C

 Added additional error locations to directly support common error reporting strategies.
- B91003C [Modified] VCS Label: A4_1C
 Added additional error locations to directly support common error reporting strategies.
- B91003D [Modified] VCS Label: A4_1C

 Added additional error locations to directly support common error reporting strategies.
- B940003 [Modified] VCS Label: A4_1C
 Added additional error locations to directly support common error reporting strategies.
- B940004 [Modified] VCS Label: A4_1C Split into 8 files; added location indicators.
- B95007B [Modified] VCS Label: A4_1A Fixed error markers @62,66,70 to match ACATS standards.
- BA21005 [New] VCS Label: A4_1D

 Test that Pure and Preelaborate aspects cannot be specified late, with a nonstatic expression, or an expression of a type other than Boolean.
- BB42001 [New] VCS Label: A4_1C $$[VCS$ Label A4_1A]$$ Check that the arguments of a pragma Assert

- have to have the correct types. [VCS Label A4 1C] Corrected two incorrect error location codes.
- CB42001 [New] VCS Label: A4_1A

 Check the usual operation of pragma Assert, including the optional message.
- BB42002 [New] New VCS Label: A4_1A

 Check that the arguments of a pragma Assert cannot be reordered even if named notation is used.
- CB42002 [New] New VCS Label: A4_1A

 Check that if the assertion policy is Ignore, none of the expressions of a pragma Assert are evaluated and no exception is raised by the pragma.
- BB42003 [New] VCS Label: A4_1A Check that a pragma Assertion_Policy is illegal if the policy is not recognized.
- CB42003 [New] VCS Label: A4_1A Check that procedure Ada.Assertions.Assert evaluates its arguments and raises Assertion_Error regardless of the assertion policy.
- CC3601C [Allowed Modification] New VCS Label: A4_1E Org VCS Label: A4_1 Required after 2018-01-01 Moved "=" for type Rec in order that it not violate 4.5.2(9.8/4).
- CC51010 [Allowed Modification] New VCS Label: A4_1F Org VCS Label: A4_1 Required after 2018-04-01

 The main subprogram name was corrected to follow the rules of the ACATS User's Guide, clause 4.3.3.
- CD1009A [Withdrawn] VCS Label: A4_1D

 Has one of the objectives of, and thus redundant with, test
 CD2A31C (now CD30012).
- CD1009B [Withdrawn] VCS Label: A4_1D Has one of the objectives of, and thus redundant with, test CD2A21C (now CD30011).
- CD1009L [Withdrawn] VCS Label: A4_1D Virtually identical to, and thus redundant with, test CD2D13A.
- CD1009M [Withdrawn] VCS Label: A4_1D Virtually identical to, and thus redundant with, test CD3014C.
- CD11001 [New] VCS Label: A4_1A

 Check that appropriate entities are visible in an aspect specification.
- CD2A21C [Withdrawn] VCS Label: A4_1D Replaced by CD30011.
- CD2A31C [Withdrawn] VCS Label: A4_1D Replaced by CD30012.

- BD30001 [New] VCS Label: A4_1D Check Legality Rules are enforced when Size is specified by an aspect specification for a type.
- BD30002 [New] VCS Label: A4_1D Check Legality Rules are enforced when Alignment is specified by an aspect specification for a type.
- BD30003 [New] VCS Label: A4_1D Check Legality Rules are enforced when Component_Size is specified by an aspect specification.
- CD30011 [New] VCS Label: A4_1D

 Merges legacy tests CD1009B and CD2A21C to eliminate duplication
 (CD1009B has the same objective as one of the objectives of
 CD2A21C) while adding modern formatting and applicability
 criteria.
- CD30012 [New] VCS Label: A4_1D

 Merges legacy tests CD1009A and CD2A31C to eliminate duplication
 (CD1009A has the same objective as one of the objectives of
 CD2A31C) while adding modern formatting and applicability
 criteria.
- BD4003A [Modified] VCS Label: A4_1A Moved error marker from 066 to 067 so it is on the incorrect construct.
- CDE0002 [Allowed Modification] New VCS Label: A4_1E Org VCS Label: A4_1 Required after 2018-01-01 Changed to use Storage_Size rather than Size so that the static expression rule of 13.14(7.2/3) is not triggered.
- CXAC009 [New] VCS Label: A4_1D Check that Stream_IO.File_Type has Preelaborable_Initialization.
- CXB3023 [New] VCS Label: A4_1A

 Check that a value of an unchecked union type (defined with pragma Unchecked Union) can be passed to a C function.
- CXB3024 [New] VCS Label: A4_1A

 Check that a value of an unchecked union type (defined with aspect Unchecked Union) can be passed to a C function.

==== Annex C ===== [None.] ==== Annex D =====

CXD2007 [Modified] VCS Label: A4_1C
 Added missing N/A => Error tag.

- LXD7001 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7003 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7004 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7005 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7006 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7007 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7008 [Modified] VCS Label: A4_1C Added missing error tag.
- LXD7009 [Modified] VCS Label: A4_1C Added location indicators.
- CXDB001 [Modified] VCS Label: A4_1C
 Added missing N/A => Error tag.
- CXDB002 [Modified] VCS Label: A4_1C Added missing N/A => Error tag.
- CXDB003 [Modified] VCS Label: A4_1C
 Added missing N/A => Error tag.
- CXDB004 [Modified] VCS Label: A4_1C Added missing N/A => Error tag.

==== Annex E =====

[None.]

==== Annex F =====

[None.]

==== Annex G =====

[None.]

==== Annex H =====

- LXH4001 [Modified] VCS Label: A4_1C Corrected format of error tag; added location indicators.
- LXH4003 [Modified] VCS Label: A4_1C Corrected format of error tag; added location indicators.

- LXH4006 [Modified] VCS Label: A4_1C Added missing error tags.
- LXH4009 [Modified] VCS Label: A4_1C Added missing error tags.
- LXH4013 [Modified] VCS Label: A4_1C Added missing error tags.
- LXH4014 [Modified] VCS Label: A4_1C Added missing error tags.
- ==== Support =====
- F611A00 [New] VCS Label: A4 1A

[VCS Label A4_1A] Foundation for tests C611A01, C611A02, and C611A03.

[VCS Label A4 $_$ 1C] Added additional data for test C611A04. The changes are only needed for that test.

- F611B00 [New] VCS Label: A4_1A Foundation for tests C611B01, C611B02, and C611B03.
- GRADE.A [Modified] VCS Label: A4_1D

[VCS Label A4_1C] Allowed manual grading for tests that are missing execution or linking (with no earlier errors). Corrected the result for binder crashes. Added category totals to the summary.

[VCS Label A4_1D] Corrected so that Annex C RQMT failures are properly counted in their own category.

GRD_DATA.A [Modified] VCS Label: A4_1D

Increased table sizes as the new tests have caused grading the entire ACATS to exceed the old limits.

- SPECIAL.A [Modified] VCS Label: A4_1C
 Added test BA21005 to the list of optional main subprograms.
- SUMMARY.A [Modified] VCS Label: A4_1C

 Corrected identification of main subprograms in modern tests.

 Changed the unit name for subunits to be the full expanded name including the parent name.

How to get new and modified tests:

The official home of the ACATS test suite is the ACAA web site. The site can be accessed at www.ada-auth.org.

The complete set of official new and modified tests are available in the Mod_4_1F.Zip and Tar files on the ACAA web site. As always, when a multi-file test is modified, we provide all of the files, including the unmodified files.

Individual new and modified tests can be retrieved from the ACATS VCS. Simply navigate to the appropriate directory (folder), and select the test you want. Select the revision you want (usually the most

recent) and it will be retrieved for you. Tests are stored in directories that correspond to the test's prefix. For instance, the test CD92001.A will be found in the CD directory. You can also browse the differences between versions of a test. [In case of a conflict, the files in the ACATS VCS should be considered the 'official' versions.]

If you cannot get the files from the official site or you cannot get the files in a format appropriate for your processor, please contact your ACAL.

The baseline ACATS 4.1 is available in various formats on the ACAA web site.

Summary lists:

Withdrawn Tests

(Refer to the main list for details)

B74001A B74001B B74203E CD1009A CD1009B CD1009L CD1009M CD2A21C CD2A31C

Allowed Modification Tests

(Refer to the main list for details)

```
B457001
            2018-04-01
B457004
           2018-04-01
B611007
           2018-04-01 [VCS Label A4 1F]
B680001
           2018-04-01
C452002
           2018-04-01 [VCS Label A4 1F]
CC3601C
           2018-01-01
CC51010
           2018-04-01
CDE0002
           2018-01-01
```

Modified Tests

(Refer to the main list for details)

B38003D B3A1001 B3A1002 B455002 B62001C B62001D B63005A B65005B B730006 B73001A B73001B B73001C B73001D B73001E B73001F B73001G B73001H B732C02 B740003 B83F02C В95007В B91003A B91003B B91003C B91003D B940003 B940004 BB42001 BD4003A C352001 C52101A CXD2007 CXDB001 CXDB002 CXDB003 CXDB004 LXD7001 LXD7003 LXD7004 LXD7005 LXD7006 LXD7007 LXD7008 LXD7009 LXH4001 LXH4003 LXH4006 LXH4009 LXH4013 LXH4014 GRADE GRD DATA SPECIAL SUMMARY

New Tests

(Refer to the main list for details)

B354002

B35A001

B611001

B611002

в611003

B611004

```
B611005
B611006
B611007 [VCS Label A4_1A]
B611008
B611009
B611010
B611011
B611012
B611013
B611014
B611015
B611016
B611017
B611018
B611019
B651001
B651002
B641003
В730011
B730012
B730013
B750A07
BA21005
BB42001
BB42002
BB42003
BD30001
BD30002
BD30003
C350001
C354004
C35A001
C3A0030
C452002 [VCS Label A4_1D]
C453001
C460014
C460015
C470001
C480001
C611A01
C611A02
C611A03
C611A04
C611B01
C611B02
C611B03
C650B04
C651001
C651002
CB42001
CB42002
CB42003
CD11001
CD30010
CD30011
CD30012
CXAC009
```

Pending New Tests

(Refer to the main list for details)

B458001 2018-07-01