### ACATS Modification List for ACATS 3.1

Version 3.1P February 8, 2017

#### What is this?

This is the ACATS modification list for ACATS 3.1. This document includes test corrections, test removals, and new tests for ACATS 3.1. ACATS 3.1 is the current test suite for the version of Ada that became current with the approval and publication of Amendment 1 by ISO as ISO/IEC 8652:1995/AMD 1:2007 (often known as "Ada 2005").

ACATS Modification List version 2.6D for ACATS 2.6 is the current list for that test suite. ACATS 2.6 should be used for testing Ada 95 implementations, and will continue to be maintained as necessary for the foreseeable future.

ACATS Modification List version 4.1C is the current list for ACATS 4.1. ACATS 4.1 should be used for testing the third edition of Ada, ISO/IEC 8652:2012 (usually known as "Ada 2012").

### Changes from the last list:

A number of tests changed status on January 1<sup>st</sup>, this list reflects those changes.

New tests C460014 and C460015 check that access type conversions make appropriate tag checks. This checks 4.6(42) via 4.6(50) – Ada 95 rules.

Test B730006 was corrected to have the correct format for error tags (and to add location indicators).

Test B940004 was split into 8 files so that each file contains only one unit with an error (which is more realistic and a slightly tougher test), adding location indicators.

Tests CXD2007, CXDB001, CXDB002, CXDB003, and CXDB004 were modified to add the missing N/A => ERROR tag.

Tests LXH4001 and LXH4003 had improperly spelled error tags, and tests LXD7001, LXD7003, LXD7004, LXD7005, LXD7006, LXD7007, LXD7008, LXH4006, LXH4009, LXH4013, and LXH4014 had no error tags at all. As all of these tests can report compile-time errors, proper tags are needed.

Test LXD7009 had location indicators added (these tell the grading tool to allow additional reasonable outcomes).

Tests B63005A, B63005B, B73001A, B73001B, B73001C, B73001D, B73001E, B73001F, B73001G, B73001H, B91003A, B91003B, B91003C, B91003D, and B940003 had additional error tags added in order to directly allow reasonable and common error reporting strategies.

New tests B730011 and B730012 generalize the legacy tests B74001A and B74001B (which are withdrawn); Ada 2012 has 6 kinds of private types and 6 kinds of private extension subject to 7.3(4). The new tests try a few examples of each rather than trying to be exhaustive as the old tests did.

New tests posted between January 1, 2017 and March 31, 2017 will become required for conformity assessments on October 1, 2017. New tests posted between October 1, 2016 and December 31, 2016 will become required for conformity assessments on July 1, 2017. New tests posted between July 1, 2016 and September 30, 2016 will become required for conformity assessments on April 1, 2017. New tests inserted between October 1, 2013 and June 30, 2016 are now required for conformity assessments. All other tests

previously inserted into ACATS 3.0 are part of ACATS 3.1 and are required for conformity assessment. The effective dates of tests are marked in the lists.

Questions about this document? Contact the ACAA Technical Agent at <a href="mailto:agent@ada-auth.org">agent@ada-auth.org</a>.

## Ada 2012 compatibility:

This test suite is designed for Ada 2005. ACATS 4.1 should be used to test Ada 2012 implementations. There are a significant number of tests in ACATS 3.1 that are incompatible with the requirements of Ada 2012.

#### **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:

```
<section|chapter>.<clause>[.<subclause>]:<paragraph>
```

These references are to the consolidated Ada standard as available at <a href="http://www.adaic.org/resources/add-contentstandards/05rm/html/RM-TOC.html">http://www.adaic.org/resources/add-contentstandards/05rm/html/RM-TOC.html</a>.

## Main list:

Replaced by tests  ${\tt B3A1007}$  and  ${\tt B3A1A05}$  (and existing tests  ${\tt B3A1A01}$  and  ${\tt B3A1A02}$ ).

- C390012 [New] VCS Label: A3\_1J
  Check the operation of Ada.Tags.Generic Dispatching Constructor.
- C391003 [New] VCS Label: A3\_1F

  [VCS Label A3\_1E] Check that a type extension can be declared in a more nested scope than its parent type, and that overridden subprograms of that extension can be dispatched to.

  [VCS Label A3 1F] Eliminated an overlong line.
- B393005 [Modified] VCS Label: A3\_1B

  Declaration @114 is illegal because it inherits an abstract function that is not overridden, as described in AI05-0097-1.
- B393011 [New] VCS Label: A3\_1E

  Check that an abstract routine of an abstract partial view overridden by a non-abstract routine in the private part requires overriding when it is inherited if the private part is not visible where it is inherited.
- C3A0030 [New] VCS Label: A3\_1L Check that an access discriminant is only null excluding if it includes a null exclusion.
- B3A1001 [Modified] VCS Label: A3\_1M

  [VCS Label A3\_1B] Type UT1 @78 is supposed to be tagged incomplete, else it's the same as type U1.

  [VCS Label A3\_1M] Split Pack6 so possible error sets don't intersect; fixed overlong lines.
- B3A1002 [Modified] VCS Label: A3\_1M

  [VCS Label A3\_1B] Type UT1 @77 is supposed to be tagged incomplete, else it's the same as type U1.

  [VCS Label A3\_1M] Split Pack6 so possible error sets don't intersect; fixed overlong lines.
- C3A1003 [New] VCS Label: A3\_1E Check that a dereference of an access-to-tagged-incomplete type can be passed as a parameter.
- C3A1004 [New] VCS Label: A3\_1E

  Check that a parameter of a tagged incomplete type can be passed as a parameter.
- B3A1007 [New] VCS Label: A3\_1B Check that constraints and exclusions aren't allowed on an incomplete type in access type and subtype declarations.
- B3A1008 [New] VCS Label: A3\_1F

  [VCS Label A3\_1E] Check that a dereference of an access-to-incomplete type cannot be used as a prefix.

  [VCS Label A3\_1F] Eliminated overlong lines.
- B3A1009 [New] VCS Label: A3\_1F
  [VCS Label A3\_1E] Check that a dereference of an access-to-incomplete view cannot be used as a prefix. Check that a parameter of an incomplete view cannot be used as a prefix.
  [VCS Label A3 1F] Eliminated overlong lines.

- B3A1A05 [New] VCS Label: A3\_1B Check that generic formal objects cannot be declared with an incomplete view.
- C3A2004 [New] VCS Label: A3\_1D

  Check that the type of the prefix of 'Access is used to resolve the expected type of the use of the attribute.
- B3A2017 [New] VCS Label: A3\_1F
  [VCS Label A3\_1D] Check P'Access is not allowed in a generic body if P is declared in the generic (including in the parent of a child or in a formal package) and the access type is a formal type or outside of the generic.
  [VCS Label A3 1F] Eliminated overlong lines.
- B431006 [New] VCS Label: A3\_1D Check that if a variant part is not nested in an unselected variant, the value of the governing discriminant of a variant in a record aggregate cannot be non-static.
- B43102A [Withdrawn] VCS Label: A3\_1D Replaced by B431006.
- B455002 [Modified] VCS Label: A3 $_{1}$ M Corrected casing of error tags and fixed overlong lines.
- C460014 [Pending New] New VCS Label: A3\_1P
  Required after 2017-10-01
  Check that Constraint\_Error is raised appropriately when converting access-to-classwide to another access type.
- C460015 [Pending New] New VCS Label: A3\_1P
  Required after 2017-10-01
  Check that Constraint\_Error is raised appropriately when converting access-to-limited-classwide to another access type.
- C480001 [New] VCS Label: A3\_1L Check that an initialized allocator for a class-wide type does an accessibility check on the tag of the initializing object.
- B480002 [New] VCS Label: A3\_1F

  [VCS Label A3\_1E] Check that an initialized allocator for an access type with a class-wide designated type does not create an object whose type is more local than the access type.

  [VCS Label A3 1F] Eliminate overlong lines and tab characters.
- B480003 [New] VCS Label: A3\_1L [VCS Label A3\_1E] Check that an uninitialized allocator for an access type with a class-wide designated type does not create an object whose type is more local than the access type. [VCS Label A3\_1F] Eliminate overlong lines and tab characters. [VCS Label A3\_1L] Corrected test objective and test description; the test code is unmodified.
- C52101A [Modified] VCS Label: A3\_1M

  Corrected comment @49 not to have the form of an error tag.
- B540002 [New] VCS Label: A3\_1B Check that case statement coverage rules are enforced for modular types.

- C540002 [New] VCS Label: A3\_1B

  Check that the selecting\_expression of a case statement can be resolved using the requirement that it be any discrete type.
- C540002 [Modified] VCS Label: A3\_1F Eliminated overlong lines.
- C620001 [New] VCS Label: A3\_1B Check that elementary types are passed by-copy.
- B62001C [Modified] VCS Label: A3\_1M 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: A3\_1M Changed error @41 to be optional, as the syntax error @33 is required (and the comment that only one error need be detected is boqus).
- C62003A [Withdrawn] Org VCS Label: A3\_1B Replaced by test C620001.
- B640001 [New] VCS Label: A3\_1F [VCS Label A3\_1D] Check that abstract nondispatching operations do not participate in resolution. [VCS Label A3\_1F] Eliminate overlong lines and tab characters.
- C640002 [New] VCS Label: A3\_1F

  [VCS Label A3\_1D] Check that an abstract nondispatching operator provides a way to eliminate an unwanted predefined operator.

  [VCS Label A3 1F] Eliminate overlong lines.
- B65005A [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B65005B [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- C660001 [New] VCS Label: A3\_1B

  Check that a matching "/=" is defined for an explicitly declared "=" operator with a result of Boolean.
- B730006 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Corrected format of error tags; added location indicators.
- B730008 [New] VCS Label: A3\_1A Check that a tagged partial view and its completion must have the same set of interfaces.
- B730009 [New] VCS Label: A3\_1F [VCS\_Label A3\_1A] Check that a tagged partial view can be synchronized if and only if the completion is a synchronized type. [VCS Label A3\_1F] Completion of Priv12 @131 violates 7.3(10.1/3).
- B730010 [New] VCS Label: A3 1F

Check 7.3(10.1/3).

- B730011 [Pending New] New VCS Label: A3\_1P Required after 2017-10-01
  - Test various rules about completions of private types and extensions; replaces test B74001A.
- B730012 [Pending New] New VCS Label: A3 1P Required after 2017-10-01
  - Test various rules about completions of private types and extensions in generic units; replaces test B74001B.
- B73001A [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001B [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001C [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001D [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001E [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001F [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001G [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B73001H [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B740003 [Modified] VCS Label: A3\_1M 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: A3\_1P Replaced by B730011.
- B74001B [Withdrawn] VCS Label: A3\_1P Replaced by B730012.

- B750A01 [Modified] VCS Label: A3\_1J

  The qualification @129 should be for Lim Ext, not Lim Rec.
- B750A02 [Modified] VCS Label: A3\_1J

  The qualification @131 should be for Lim Ext, not Lim Rec.
- B750A04 [New] VCS Label: A3\_1J Check that only legal expressions are allowed in the qualified expression of an allocator for a limited object.
- B750A06 [New] VCS Label: A3\_1J Check that only legal expressions are allowed in the expression of a simple return statement for a function that returns a limited type.
- C760015 [New] VCS Label: A3\_1L

  [VCS Label A3\_1E] Check that a controlled type can be declared within a subprogram.

  [VCS Label A3\_1F] Eliminated overlong lines.

  [VCS Label A3\_1L] Corrected one of the potential results for Subtest2(4) to be "Iafcf", not "IafcF".
- B831004 [New] VCS Label: A3\_1G Check that overriding indicators are properly enforced for types derived from a generic formal type. (Nested generic specification cases.)
- B83F02C [Modified] VCS Label: A3\_1M Updated many optional error markers to match ACATS standards.
- B840002 [New] VCS Label: A3\_1G Check a package use clause cannot denote a limited view or a non-package.
- C920001 [New] VCS Label: A3\_1B Check activation (and non-activation) of tasks declared as (part of) return objects in extended return statements.
- B91003A [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B91003B [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B91003C [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01

  Added additional error locations to directly support common error reporting strategies.
- B91003D [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added additional error locations to directly support common error reporting strategies.
- B940003 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01

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

- B940004 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1
  Required after 2017-07-01
  Split into 8 files; added location indicators.
- B95007B [Modified] VCS Label: A3\_1M Fixed error markers @62,66,70 to match ACATS standards.
- BA12017 [New] VCS Label: A3\_1F
  [VCS Label A3\_1D] Check that a limited with clause is not allowed on a descendant of the named package.
  [VCS Label A3 1F] Eliminated overlong line.
- BA15003 [New] VCS Label: A3\_1D Check that a library unit pragma must apply to a library unit.
- CB30001 [New] VCS Label: A3\_1C

  Check that the optional message parameter is supported in a raise statement, and that the message can be retrieved with Exception Message.
- BB42001 [New] VCS Label: A3\_1L Check that the arguments of a pragma Assert have to have the correct types.
- CB42001 [New] VCS Label: A3\_1L Check the usual operation of pragma Assert, including the optional message.
- BB42002 [New] VCS Label: A3\_1L Check that the arguments of a pragma Assert cannot be reordered even if named notation is used.
- CB42002 [New] VCS Label: A3\_1L 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: A3\_1L Check that a pragma Assertion\_Policy is illegal if the policy is not recognized.
- CB42003 [New] VCS Label: A3\_1L Check that procedure Ada.Assertions.Assert evaluates its arguments and raises Assertion\_Error regardless of the assertion policy.
- CC30003 [Modified] VCS Label: A3\_1F Eliminated overlong lines.
- CC30004 [New] VCS Label: A3\_1F
  [VCS Label A3\_1B] Check that if a generic actual type is elementary, it is passed by copy within an instance.
  [VCS Label A3 1F] Eliminated overlong lines and tab characters.
- CC3017C [Withdrawn] Org VCS Label: A3\_1B Replaced by test CC30004.
- BC60001 [New] VCS Label: A3\_1D

  Test rules associated with formal subprogram defaults of null.

- CC60001 [New] VCS Label: A3\_1H

  Check that calls on a formal abstract subprogram are dispatching.
- BC60002 [New] VCS Label: A3\_1H

  Test rules associated with the controlling type of a formal abstract subprogram.
- BC60004 [New] VCS Label: A3\_1H

  Check that a call on a formal abstract subprogram must be dispatching.
- CD30008 [New] VCS Label: A3\_1K
  Renaming of previous test CD33001 (there is no subclause 13.3.3).
  The test is unchanged other than renaming the units involved and fixing an overlong line.
- CD30009 [New] VCS Label: A3\_1K
  Renaming of previous test CD33002 (there is no subclause 13.3.3).
  The test is unchanged other than renaming the units involved and fixing an overlong line.
- CD33001 [Withdrawn] VCS Label: A3\_1K
  Renamed to CD30008, as there is no subclause 13.3.3.
- CD33002 [Withdrawn] VCS Label: A3\_1K
  Renamed to CD30009, as there is no subclause 13.3.3.
- BD4003A [Modified] VCS Label: A3\_1M Moved error marker from 066 to 067 so it is on the incorrect construct.
- BDD2004 [New] VCS Label: A3\_1A

  Check that subprograms specified for stream attributes meet the requirements for such subprograms. This version corrects the location of 'Class @230, 235, 240.
- BDD2004 [Modified] VCS Label: A3\_1F
  [VCS Label A3\_1C] Error @232 is legal by AI12-0121-1.
  [VCS Label A3 1F] Eliminated overlong lines.
- CXA4037 [New] VCS Label: A3\_1G Check Ada.Strings.Fixed.Find\_Token against rule from 2001 Corrigendum.
- CXA5016 [New] VCS Label: A3\_1F [VCS Label A3\_1D] Check operation of attribute Machine\_Rounding. [VCS Label A3 1F] Eliminated overlong lines.
- CXAA021 [New] VCS Label: A3\_1D Check file operations of Text\_IO.Bounded\_IO.
- CXAA022 [New] VCS Label: A3\_1D Check file operations of Text IO.Unbounded IO.
- CXAB002 [New] VCS Label: A3\_1D Check file operations of Wide Text IO.Wide Bounded IO.
- CXAB003 [New] VCS Label: A3\_1D Check file operations of Wide Wide Text IO.Wide Wide Bounded IO.

- CXAB004 [New] VCS Label: A3\_1D Check file operations of Wide Text IO.Wide Unbounded IO.
- CXAB005 [New] VCS Label: A3\_1D Check file operations of Wide\_Wide\_Text\_IO.Wide\_Wide\_Unbounded\_IO.
- CXAC008 [New] VCS Label: A3 1J

[VCS Label A3\_1D] Check that Stream\_IO files opened with mode Out File are not truncated by Close or Reset.

 $[VC\overline{S}]$  Label A3\_1E] Corrected required file size in subtest 8, and various failure messages.

[VCS Label A3\_1F] Eliminated overlong lines.

[VCS Label A3 1J] Corrected a failure message.

CXAG001 [New] VCS Label: A3 1F

Check that Ada. Directories can be used to create and delete directories.

CXAH001 [New] VCS Label: A3 1F

[VCS Label A3\_1E] Test that package Environment\_Variables can be used to read environment variables.

[VCS Label A3 1F] Added missing Applicability Criteria.

CXAH002 [New] VCS Label: A3 1F

[VCS Label A3\_1E] Test that package Environment\_Variables can be used to modify environment variables.

[VCS Label A3 1F] Added missing Applicability Criteria.

- CXAI001 [New] VCS Label: A3\_1A

  Check the functionality defined in package Ada.Containers.Vectors.
- CXAI002 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Doubly Linked Lists.
- CXAI003 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Hashed Maps.
- CXAI004 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Ordered Maps.
- CXAI005 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Hashed Sets.
- CXAI006 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Ordered\_Sets.
- FXAIA00 [New] VCS Label: A3\_1A Foundation containing types and values to be used to check the functionality of the indefinite containers.
- CXAIA01 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Indefinite Vectors.
- CXAIA02 [New] VCS Label: A3\_1A

  Check the functionality defined in package

- Ada.Containers.Indefinite Doubly Linked Lists.
- CXAIA03 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Indefinite Hashed Maps.
- CXAIA04 [New] VCS Label: A3\_1A Check the functionality defined in package Ada.Containers.Indefinite Ordered Maps.
- CXAIA05 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Indefinite Hashed Sets.
- CXAIA06 [New] VCS Label: A3\_1A

  Check the functionality defined in package
  Ada.Containers.Indefinite Ordered Sets.
- CXB3017 [New] VCS Label: A3\_1B Check that pragma Export can be used on subprograms and objects.
- CXB3023 [New] VCS Label: A3\_1M
   [VCS Label A3\_1K] Check that a value of an unchecked union type
   (defined with pragma Unchecked\_Union) can be passed to a C
   function.
   [VCS Label A3 1M] Added missing N/A => ERROR markers.

==== Annex C =====

[None.]

==== Annex D =====

- CXD2007 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing N/A  $\Rightarrow$  Error tag.
- LXD7001 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.
- LXD7003 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.
- LXD7004 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.
- LXD7005 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.
- LXD7006 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.
- LXD7007 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.

- LXD7008 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tag.
- LXD7009 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added location indicators.
- CXDB001 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing N/A => Error tag.
- CXDB002 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing N/A => Error tag.
- CXDB003 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing N/A  $\Rightarrow$  Error tag.
- CXDB004 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing N/A  $\Rightarrow$  Error tag.

==== Annex E =====

[None.]

==== Annex F =====

[None.]

==== Annex G =====

CXG2001 [Modified] VCS Label: A3\_1B

Formula for Model\_Mantissa was replaced in Ada 2005 (and really in the Corrigendum), but was never updated in this test. This only affects machines with decimal floating point.

==== Annex H =====

- LXH4001 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Corrected format of error tag; added location indicators.
- LXH4003 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Corrected format of error tag; added location indicators.
- LXH4006 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tags.
- LXH4009 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tags.
- LXH4013 [Allowed Modification] New VCS Label: A3\_1P Org VCS Label: A3\_1 Required after 2017-07-01 Added missing error tags.

```
LXH4014 [Allowed Modification] New VCS Label: A3_1P Org VCS Label: A3_1 Required after 2017-07-01 Added missing error tags.
```

==== Support =====

IMPDEF [Modified] VCS Label: A3 1K

[VCS Label A3\_1B] Added constants for the external names for the imported and exported routines in test CXB3017. The change is only needed for that test, it has no effect on any other test.
[VCS Label A3\_1E] Added constants for the names of environment variables used by tests CXAH001 and CXAH002. Also removed obsolete .AW file constants (these are not used as test source has been provided in UTF-8 format since the release of ACATS 3.0). The change is only needed for those tests, it has no effect on any other tests.

[VCS Label A3\_1F] Added a constant and function used by test CXAG001. The change is only needed for that test, it has no effect on any other tests.

[VCS Label A3\_1K] Added constants for the external name for the imported routine in test CXB3023. The change is only needed for that test, it has no effect on any other test.

#### How to get new and modified tests:

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

The complete set of official new and modified tests are available in the Mod\_3\_1P.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 3.1 is available in various formats on the ACAA web site.

### **Summary lists:**

#### Withdrawn Tests

(Refer to the main list for details)

B38105A

B43102A

B74001A

B74001B

C62003A

# **Allowed Modification Tests**

(Refer to the main list for details)

B63005A	2017-07-01
B65005B	2017-07-01
B730006	2017-07-01 2017-07-01
B73001A B73001B	2017-07-01
B73001C	2017-07-01
B73001D	2017-07-01
B73001E	2017-07-01
B73001F	2017-07-01
B73001G B73001H	2017-07-01 2017-07-01
B91003A	2017-07-01
B91003B	2017-07-01
B91003C	2017-07-01
B91003D	2017-07-01
B940003	2017-07-01
B940004 CXD2007	2017-07-01 2017-07-01
CXDB001	2017-07-01
CXDB002	2017-07-01
CXDB003	2017-07-01
CXDB004	2017-07-01
LXD7001	2017-07-01
LXD7003 LXD7004	2017-07-01 2017-07-01
LXD7005	2017-07-01
LXD7006	2017-07-01
LXD7007	2017-07-01
LXD7008	2017-07-01
LXD7009 LXH4001	2017-07-01 2017-07-01
LXH4001	2017-07-01
LXH4006	2017-07-01
LXH4009	2017-07-01
LXH4013	2017-07-01
LXH4014	2017-07-01

# **Modified Tests**

(Refer to the main list for details)

```
B38003D
B393005
B3A1001 [VCS A3_1M]
B3A1002 [VCS A3_1M]
```

```
B455002
B62001C
B62001D
B740003
B750A01
B750A02
B83F02C
B95007B
BD4003A
BDD2004
C52101A
C540002
CC30003
CXG2001
IMPDEF [VCS A3_1K]
```

### **New Tests**

### (Refer to the main list for details)

В393011 B3A1007 B3A1008 B3A1009 B3A1A05 B3A2017 B431006 B480002 В480003 B540002 B640001 B730008 В730009 В730010 B750A04 B750A06 B831004 B840002 BA12017 BA15003 BB42001 BB42002 BB42003 BC60001 BC60002 BC60004 BDD2004 C390012 C391003 C3A0030 C3A1003 C3A1004 C3A2004 C480001 C540001 C620001

C640002

```
C660001
C760015
C920001
CB30001
CB42001
CB42002
CB42003
CC30004 [VCS Label A3_1F]
CC60001
CD30008
CD30009
CXA4037
CXA5016
CXAA021
CXAA022
CXAB002
CXAB003
CXAB004
CXAB005
CXAC008
CXAG001
CXAH001
CXAH002
CXAI001
CXAI002
CXAI003
CXAI004
CXAI005
CXAI006
CXAIA01
CXAIA02
CXAIA03
CXAIA04
CXAIA05
CXAIA06
CXB3017
CXB3023
FXAIA00
```

# **Pending New Tests**

### (Refer to the main list for details)

В730011	2017-10-01
В730012	2017-10-01
C460014	2017-10-01
C460015	2017-10-01