ACATS Modification List for ACATS 3.1
Version 3.1S
June 13, 2018

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 2.6G 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 4.1H 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:

Modified the grading criteria for test B740003 to note that processing the main subprogram is optional.

New test B853001 checks that renamed limited views are not used in a unit that doesn't with the original
package.

New test B854002 checks that null exclusions match properly in subprogram renaming.

New test BA12018 checks that names that are mentioned but not named in a private with are also private.

New tests BC40003, BC54004, and BC60005 check that null exclusions match properly in a generic
instantiation.

Support file Tctouch.Ada was modified to avoid reporting Trace Overflow more than once (if a compiler
bug causes Touch to be called thousands of times, the result files were unmanageable).

New tests posted between April 1, 2018 and June 30, 2018 will become required for conformity
assessments on January 1, 2019. New tests posted between January 1, 2018 and March 31, 2018 will
become required for conformity assessments on October 1, 2018. New tests posted between October 1,
2017 and December 31, 2017 will become required for conformity assessments on July 1, 2018. New tests
posted before October 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.

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 http://www.adaic.org/resources/add-contentstandards/05rm/html/RM-TOC.html.

Main list:

===== Core Language =====

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

C352001 [Modified] VCS Label: A3_1Q
Corrected Failed message @267 to reflect intended result.

B354002 [New] VCS Label: A3_1Q
Test basic requirements for the Mod attribute.

C354004 [New] VCS Label: A3_1Q
Test basic operation of the Mod attribute.

B37309B [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

B37310B [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.
B37311A [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

B38003D [Modified] VCS Label: A3_1M
Corrected error tags @70,76,82,88 so “optional” and “error” are on the same line, as required by the test standards.

B38105A [Withdrawn] Org VCS Label: A3_1B
Replaced by tests B3A1007 and B3A1A05 (and existing tests B3A1A01 and 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.

B392002 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Revised to use Possible Error tags, and added error location indicators.

B392003 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

B392004 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

B392005 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Revised to use Possible Error tags, and added error location indicators.

B393001 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

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.

B393007 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies. Fixed overlong lines.

B393010 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies. Fixed overlong lines.

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.
B3A2007 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error
reporting strategies.

B3A2008 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error
reporting strategies.

B3A2009 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Removed tabs to meet test format standards; added error location
indicators.

B3A2011 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error
reporting strategies.

B3A2012 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error
reporting strategies.

B3A2016 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error
reporting strategies.

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.

C453001 [New] VCS Label: A3_1Q
Check that modular adding operators wrap around rather than
raising Constraint_Error.

B455002 [Modified] VCS Label: A3_1M
Corrected casing of error tags and fixed overlong lines.

C460014 [New] VCS Label: A3_1P
Check that Constraint_Error is raised appropriately when
converting access-to-classwide to another access type.

C460015 [New] VCS Label: A3_1P
Check that Constraint_Error is raised appropriately when converting access-to-limited-classwide to another access type.

C480001 [New] VCS Label: A3_1Q
[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.
[New] VCS Label: A3_1Q] 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.

B480002 [New] VCS Label: A3_1F
[New] 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.

B480003 [New] VCS Label: A3_1L
[New] 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.
[New] VCS Label: A3_1L] Corrected test objective and test description; the test code is unmodified.

B480004 [Pending New] New VCS Label: A3_1R
Required after 2018-10-01
Check that an allocator is illegal if the access type has a Storage_Size that is statically zero.

B4A010C [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

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.

B540002 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1B
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

C540002 [New] VCS Label: A3_1B
[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.

B54B01B [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.
Added additional error locations to directly support common error reporting strategies.

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).

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).

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 [Modified] VCS Label: A3_1P
    Added additional error locations to directly support common error
reporting strategies.

B65005B [Modified] New VCS Label: A3_1P
    Added additional error locations to directly support common error
reporting strategies.

B651001 [New] VCS Label: A3_1Q
    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: A3_1Q
    Check that a nonreturning procedure can raise an exception and
raises Program_Error otherwise (pragma No_Return version).

C660001 [New] VCS Label: A3_1B
    Check that a matching "/=" is defined for an explicitly declared
"=" operator with a result of Boolean.

B730006 [Modified] VCS Label: A3_1P
    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 [New] VCS Label: A3_1P
    Test various rules about completions of private types and
extensions; replaces test B74001A.

B730012 [New] VCS Label: A3_1P
    Test various rules about completions of private types and
extensions in generic units; replaces test B74001B.

B730013 [New] VCS Label: A3_LQ
Test operations available for a private type; replaces test B74203E.

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

B73001B [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B73001C [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B73001D [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B73001E [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B73001F [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B73001G [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B73001H [Modified] VCS Label: A3_LP
Added additional error locations to directly support common error reporting strategies.

B740003 [Modified] VCS Label: A3_LM
[VCS Label A3_LM] Modified criteria @75 so that it doesn't look like an error tag to the grading tools; also fixed an overlong line.

Required after 2018-10-01
[VCS Label A3_LS] Modified grading to document that processing the main is optional. Added error location indicators.

Replaced by B730011.

B74001B [Withdrawn] VCS Label: A3_LP
Replaced by B730012.

B74203E [Withdrawn] VCS Label: A3_LQ
Replaced by B730013.
The qualification @129 should be for Lim_Ext, not Lim_Rec.

The qualification @131 should be for Lim_Ext, not Lim_Rec.

Check that only legal expressions are allowed in the qualified expression of an allocator for a limited object.

Check that only legal expressions are allowed in the expression of a simple return statement for a function that returns a limited type.

Check that a controlled type can be declared within a subprogram. Eliminated overlong lines. Corrected one of the potential results for Subtest2(4) to be "Iafcf", not "IafcF".

Checks that functions that return immutably limited types are built-in-place.

The discriminant @90 needs a default expression as all or none of the discriminants of a type need defaults. Also added error location indicators.

Corrected bad error tag, and added error location indicators.

Removed possible error cascades, reformatted some error tags, and added error location indicators.

Check that overriding indicators are properly enforced for types derived from a generic formal type. (Nested generic specification cases.) Updated many optional error markers to match ACATS standards.

Check a package use clause cannot denote a limited view or a non-package.

Checks that a renamed limited view cannot be used where there is
not a with for the original package.

B854002 [Pending New] New VCS Label: A4_1H
Required after 2019-01-01
When parameter or result has a null exclusion for a subprogram
rename, check that the subtype of the corresponding parameter or
result of the renamed subprogram must exclude null.

B91003A [Modified] VCS Label: A3_1P
Added additional error locations to directly support common error
reporting strategies.

B91003B [Modified] VCS Label: A3_1P
Added additional error locations to directly support common error
reporting strategies.

B91003C [Modified] VCS Label: A3_1P
Added additional error locations to directly support common error
reporting strategies.

B91003D [Modified] VCS Label: A3_1P
Added additional error locations to directly support common error
reporting strategies.

C920001 [New] VCS Label: A3_1B
Check activation (and non-activation) of tasks declared as (part
of) return objects in extended return statements.

B940003 [Modified] VCS Label: A3_1P
Added additional error locations to directly support common error
reporting strategies.

B940004 [Modified] VCS Label: A3_1P
Split into 8 files; added location indicators.

B95007B [Modified] VCS Label: A3_1M
Fixed error markers @62,66,70 to match ACATS standards.

BA1001D [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Revised to mark the main subprogram as optional, as it is not
necessary to check the test objective. Added error location
indicators.

BA1020F [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Revised to mark the main subprogram as optional, as it is not
necessary to check the test objective. Added error location
indicators.

BA11007 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Split into six test files to avoid requiring error recovery.

BA11013 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Revised to make processing the last compilation unit optional,
as it is not necessary to check the test objective. Added error location indicators.

BA1101E [Withdrawn] Org VCS Label: A3_1R
    Replaced by test BA14001.

BA12010 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
    Required after 2018-07-01
    Revised to use Possible Error tags, and added error location indicators.

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.

BA12018 [Pending New] New VCS Label: A3_1S
    Required after 2019-01-01
    Check that names mentioned but not named in a private with are also treated as privately withed.

BA14001 [Pending New] New VCS Label: A3_1R
    Required after 2018-10-01
    Replaces test BA1101E with modern format and additional test cases for Ada 95 compilation units.

BA14002 [Pending New] New VCS Label: A3_1R
    Required after 2018-10-01
    Similar to BA14001, testing private with.

BA14003 [Pending New] New VCS Label: A3_1R
    Required after 2018-10-01
    Checks that a unit is illegal if it depends on two versions of the same unit.

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.

BC40003 [Pending New] New VCS Label: A3_1S
Required after 2019-01-01
Checks that the subtype of the actual for a generic formal object with a null exclusion must exclude null.

BC51016 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Corrected bad error tag, and added error location indicators.

BC54004 [Pending New] New VCS Label: A3_1S
Required after 2019-01-01
Checks that the null exclusion of the formal type and of the actual subtype for a generic formal access type must match.

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.

BC60005 [Pending New] New VCS Label: A3_1S
Required after 2019-01-01
Checks that the subtype of a parameter or result of the actual subprogram for a generic formal subprogram where the corresponding parameter or result has a null exclusion must exclude null.

CD1009A [Withdrawn] VCS Label: A3_1Q
Has one of the objectives of, and thus redundant with, test CD2A31C (now CD30012).

CD1009B [Withdrawn] VCS Label: A3_1Q
Has one of the objectives of, and thus redundant with, test CD2A21C (now CD30011).

CD1009L [Withdrawn] VCS Label: A3_1Q
Virtually identical to, and thus redundant with, test CD2B13A.

CD1009M [Withdrawn] VCS Label: A3_1Q
Virtually identical to, and thus redundant with, test CD3014C.

CD2A21C [Withdrawn] VCS Label: A3_1Q
Replaced by CD30011.

CD2A31C [Withdrawn] VCS Label: A3_1Q
Replaced by CD30012.

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.

CD30011 [New] VCS Label: A3_1Q
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: A3_1Q
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.

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 @66 to @67 so it is on the incorrect construct.

BDB0A01 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Revised to use Possible Error tags, and added error location indicators.

BDD2003 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Added additional error locations to directly support common error reporting strategies.

BDD2004 [New] VCS Label: A3_1F
[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.

CXA4037 [New] VCS Label: A3_1G

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.
[VCS 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.
Check the functionality defined in package Ada.Containers.Vectors.

Check the functionality defined in package Ada.Containers.Doubly_Linked_Lists.

Check the functionality defined in package Ada.Containers.Hashed_Maps.

Check the functionality defined in package Ada.Containers.Ordered_Maps.

Check the functionality defined in package Ada.Containers.Hashed_Sets.

Check the functionality defined in package Ada.Containers.Ordered_Sets.

Foundation containing types and values to be used to check the functionality of the indefinite containers.

Check the functionality defined in package Ada.Containers.Indefinite_Vectors.

Check the functionality defined in package Ada.Containers.Indefinite_Doubly_Linked_Lists.

Check the functionality defined in package Ada.Containers.Indefinite_Hashed_Maps.

Check the functionality defined in package Ada.Containers.Indefinite_Ordered_Maps.

Check the functionality defined in package Ada.Containers.Indefinite_Hashed_Sets.

Check the functionality defined in package Ada.Containers.Indefinite_Ordered_Sets.

Check that pragma Export can be used on subprograms and objects.

Check that a value of an unchecked union type (defined with pragma Unchecked_Union) can be passed to a C function.
function.
[VCS Label A3_1M] Added missing N/A => ERROR markers.

===== Annex C =====

BXC6A03 [Allowed Modification] New VCS Label: A3_1R Org VCS Label: A3_1
Required after 2018-07-01
Removed test case changed by AI05-0218-1.

===== Annex D =====

CXD2007 [Modified] VCS Label: A3_1P
Added missing N/A => Error tag.

LXD7001 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7003 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7004 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7005 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7006 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7007 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7008 [Modified] VCS Label: A3_1P
Added missing error tag.

LXD7009 [Modified] VCS Label: A3_1P
Added location indicators.

CXDB001 [Modified] VCS Label: A3_1P
Added missing N/A => Error tag.

CXDB002 [Modified] VCS Label: A3_1P
Added missing N/A => Error tag.

CXDB003 [Modified] VCS Label: A3_1P
Added missing N/A => Error tag.

CXDB004 [Modified] VCS Label: A3_1P
Added missing N/A => Error tag.

===== Annex E =====

[None.]

===== Annex F =====
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.

LXH4001 [Modified] VCS Label: A3_1P
Corrected format of error tag; added location indicators.

LXH4003 [Modified] VCS Label: A3_1P
Corrected format of error tag; added location indicators.

LXH4006 [Modified] VCS Label: A3_1P
Added missing error tags.

LXH4009 [Modified] VCS Label: A3_1P
Added missing error tags.

LXH4013 [Modified] VCS Label: A3_1P
Added missing error tags.

LXH4014 [Modified] VCS Label: A3_1P
Added missing error tags.

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.

TCTOUCH.ADA [Allowed Modification] New VCS Label: A3_1D Org VCS Label: A3_1
Required after 2018-10-01
Added code so that Touch only reports buffer overflow once.

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_1S.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)

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**Allowed Modification Tests**

(Refer to the main list for details)

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**Modified Tests**

(Refer to the main list for details)

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New Tests

(Refer to the main list for details)

B354002
B393011
B3A1007
B3A1008
B3A1009
B3A1A05
B3A2017
Pending New Tests

(Refer to the main list for details)

B480004  2018-10-01
B853001  2019-01-01
B854002  2019-01-01
BA12018  2019-01-01
BA14001  2018-10-01
BA14002  2018-10-01
BA14003  2018-10-01
BC40003  2019-01-01
BC54004  2019-01-01
BC60005  2019-01-01
C760A02  2018-10-01