Title: Clause 26 (Numerics Library) Issues List
                    Author: Judy Ward
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                                WG21/N0998

Work Group: Library
Issue Number: 26/053
Title: remove valarray::free()?
Section: 26.3.1.7 New
Status: active
Description:

Now that valarray::resize() has been added, doesn't
resize(0) have the same semantics as free()?

Proposed Resolution:
Remove valarray::free().

Requestor: Judy Ward
Owner: Judy Ward
Emails: (email reflector messages that discuss this issue)
Papers: (committee documents that discuss this issue)

Work Group: Library
Issue Number: 26/052
Title: description of valarray destructor (Box 23)
Section: 26.3.1.1 New
Status: active
Description:
Proposed Resolution:

Change last phrase of ~valarray description from "all allocated memory is
returned to "an implementation may return all allocated memory".
Also remove Box 23.

Requestor: Daveed Vandevoorde
Owner: Judy Ward
Emails: (email reflector messages that discuss this issue)
Papers: (committee documents that discuss this issue)

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Resolution of previous numerics issues:

Issue: 26-051
Title: define return of complex of pow(0,0)
Status: The standard will say that pow(0,0) returns an
        implementation-defined value.

Issue: 26-050
Title: box 100 - clarification of motion 55
Status: passed.

Issue: 26-049
Title: exceptions in complex
Status: passed.

Issue: 26-048
Title: box 99 -- no exceptions in valarray
Status: passed.

Issue: 26-047
Title: box 98 -- description of ranges/branch cuts
Status: passed.

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Issue: 26-046
Title: box 97 - remove
Status: passed.

Issue: 26-045
Title: partial_sum semantics wrong
Status: passed.

Issue: 26-044
Title: no normative description of semantics of valarray<T>::operator[](slice)
Status: passed.

Issue: 26-043
Title: clarification to valarray min/max
Status: passed.

Issue: 26-042
Title: non-normative commentary should be moved to notes
Status: passed.

Issue: 26-041
Title: no description of ~valarray<T>
Status: passed.

Issue: 26-040
Title: non-normative commentary should be moved to notes
Status: passed.

Issue: 26-039
Title: valarray::operator T* and operator const T* cause ambiguities
Status: passed.

Issue: 26-038
Title: description of returns from arg()
Status: passed.

Issue: 26-037
Title: template <class T> shouldn't appear in detailed descriptions
Status: passed.

Issue: 26-036
Title: T should be const T& in complex mathematical ops
Status: passed.

Issue: 26-035
Title: constraints on complex type T should be specified?
Status: passed.

Issue: 26-034
Title: ambiguity with complex::operator!=?
Status: closed without action.

Issue: 26-033
Title: clarify definition of boolean mask subset operator
Status: closed without action.

Issue: 26-032
Title: Should valarray::operator! return valarray<bool> not valarray<T>?
Status: passed.

Issue: 26-031
Title: should valarray unary ops be non-members?
Status: closed without action.

Issue: 26-030
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Title: fix up what headers are included by complex,valarray, and numeric
Status: closed without action.

Issue: 26-029
Title: valarray::operator|| and valarray::operator&&
Status: passed, decided to change return type to valarray<bool>.

Issue: 26-028
Title: rename valarray::length() to valarray::size()
Status: passed.

Issue: 26-027
Title: should gslices be changed/removed?
Status: closed without action.

Issue: 26-026
Title: should valarray sum(),apply(),and reduce() be templates?
Status: closed without action.

Issue: 26-025
Title: should STL-like semantics be added to valarray?
Status: closed without action.

Issue: 26-024
Title: make valarray arithmetic operators more general?
Status: closed without action.

Issue: 26-023
Title: should min/max be global or member functions?
Status: passed.

Issue: 26-022
Title: int should be size_t for element type of indirect_array
Status: passed.

Issue: 26-021
Title: copy ctor declared for slice_array
Status: closed without action.

Issue: 26-020
Title: order of argument to valarray constructors
Status: closed without action.

Issue: 26-019
Title: Should typedefs be provided in complex lib?
Status: closed without action.

Issue: 26-018
Title: numerical programming extensions
Status: closed without action.

Issue: 26-017
Title: math function ambiguities?
Status: closed without action.

Issue: 26-016
Title: Should branch cuts and ranges be specified in complex lib?
Status: passed.

Issue: 26-015
Title: should norm() be removed/renamed in complex library?
Status: closed without action.

Issue: 26-014
Title: Friends operators within class complex
Status: passed, operators will not have to be friends.

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Issue: 26-013
Title: sqrt() function in complex lib -- which root does it return?
Status: closed without action, subsumed by Issue 26-016.


Issue: 26-012
Title: Complex class operators
Status: See resolution in post-Santa Cruz motions.


Issue: 26-011
Title: ambiguity with assignment ops in complex
Status: See resolution in post-Santa Cruz motions.


Issue: 26-010
Title: basic_complex typedefs
Status: closed without action.


Issue: 26-009
Title: valarray usefulness
Status: See resolution of X3J16/96-0039, WG21/N0857 in post-Stockholm mailing.


Issue: 26-008
Title: algebraic structures as traits
Status: closed without action.


Issue: 26-007
Title: cleanup of Chapter 26
Status: closed without action (already fixed).


Issue: 26-006
Title: changes to valarray classes
Status: passed.


Issue: 26-005
Title:  const questions with valarray
Status: passed.


Issue: 26-004
Title: should typedefs be provided in complex for backward compatability?
Status: closed without action.


Issue: 26-003
Title: Should complex real() and imag() be member functions or friends?
Status: closed without action.


Issue: 26-002
Title: Should complex insertion operator be allowed to take scalar input?
Status: passed.


Issue: 26-001
Title: Should complex operator arguments be ref or not?
Status: passed.
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