P2396R0: Concurrency TS 2 fixes

Background

LEWG has forwarded several papers to LWG targeting the next version of the concurrency TS:
- P0561: An RAII Interface for Deferred Reclamation
- P1121: Hazard Pointers: Proposed Interface and Wording for Concurrency TS 2
- P1122: Proposed Wording for Concurrent Data Structures: Read-Copy-Update (RCU)
- P1202: Asymmetric Fences
- P1478: Byte-wise atomic memcpy

(Some of these have progressed further -- P1121 and P1122 were approved in June plenary for inclusion in the TS).

During LWG pre-review of P1202, Jens Maurer noticed that while its additions were specified to be in the [atomics] clause, the paper did not actually specify that the functions would be added to the <atomic> header. A subsequent LEWG reflector discussion indicated a desire for a header under experimental/, which the other TS-targeting papers don't do. Under a little more scrutiny, the discussion also uncovered nits in the various papers. This paper fixes the various nits.

Procedurally, this is a racy process because of the various pipeline stages involved. I suggest that these changes get merged into the corresponding papers if they catch them at a pipeline stage, and otherwise into the TS itself (at least in the case of P1121 and P1122).

Header names

No forwarded proposal placed itself under the experimental folder. P1202 was forwarded despite not specifying a header at all. The LEWG mailing list discussion was uniformly in favor of the experimental/ folder. There was some discussion of whether or not the headers should be fine-grained (roughly: per-proposal) or not. I suggest fine-grained headers, for two reasons:
- This allows different vendors to implement different parts of the TS more easily (e.g. some companies have expressed support for "donating" partial implementations of some proposals).
- This is existing TS practice.

The proposed changes are therefore:
Change P0561's synopsis header from <snapshot> to <experimental/snapshot>

Change P1121's synopsis header from <hazard_pointer> to <experimental/hazard_pointer>
Change P1122's synopsis header from <rcu> to <experimental/rcu>

P1202 neglected to introduce a synopsis or to explicitly specify the header. The LWG pre-reviewer asked for P1202 to enter LWG's queue with the pre-review revisions regardless of the LEWG followup discussion on header names, and it did so with <atomic> as the header. The proposed change is therefore:
Change P1202's synopsis header from <atomic> to <experimental/asymmetric_fence>.

P1478 does not explicitly alter or introduce a synopsis, but does say that its insertions are into <atomic>. However, if we believe in fine-grained headers for TSs, this should change names anyways. The change is therefore:
Introduce a synopsis section to P1478, making the header <experimental/bytewise_atomic_memcpy>

Feature detection macros

Of the papers, only P1478 includes a feature-detection macro (P1122s claim that it introduced them after a LEWG discussion, but does not; in any case the names it proposes do not match the existing conventions). P1478 introduces __cpp_lib_bytewise_atomic_memcpy, which does not following existing TS conventions.

Existing TSs expose library feature detection with the macro prefix __cpp_lib_experimental defined globally (i.e. not inserted into <version>, as standardized functionality is). Once the TS is finalized, it will (assuming it follows the same pattern) have wording like:

An implementation that provides support for this document shall define the feature test macro(s) in Table X:

Title	Subclause	Macro name	Value	Header
Foo	X	`__cpp_lib_experimental_foo`	2021XX	`<experimental/foo>`
Bar	Y	`__cpp_lib_experimental_bar`	2021YY	`<experimental/bar>`

I suggest following this convention for the Concurrency TS.

For P0561:
Add a definition of __cpp_lib_experimental_snapshot into <experimental/snapshot>
For P1121:
Add a definition of __cpp_lib_experimental_hazard_pointer into <experimnetal/hazard_pointer>
For P1122:
Add a definition of __cpp_lib_experimental_rcu into <experimental/rcu>

For P1202:

Add a definition of __cpp_lib_experimental_asymmetric_fence into <experimental/asymmetric_fence>

For P1478:

Add a definition of __cpp_lib_experimental_bytewise_atomic_memcpy into <experimental/bytewise_atomic_memcpy>, remove the insertion into <version>, remove the unprefixed definition.