

Subject: Relax C1226 a little bit
 From: Van Snyder

1 **Number**

2 TBD

3 **Title**

4 GRelax C1226 a little bit.

5 **Submitted By**

6 J3

7 **Status**

8 For consideration.

9 **Basic Functionality**

10 Relax C1226 to allow non-keyword actual arguments to follow keyword arguments so long as all pre-
 11 ceeding keyword arguments would also correspond by position.

12 **Rationale**

13 Keyword-identified actual arguments have documentary value, especially in the case that an actual
 14 argument is a constant.

15 Here's a call in one of my programs:

```
16 call frequency_loop ( alpha_path_c(:npc), beta_path_c(:npc,:),      &
17   & c_inds(:npc), del_s(:npc), del_zeta(:npc),                      &
18   & do_calc_fzp(:no_ele,:), do_calc_zp(:no_ele,:), do_GL(:npc),   &
19   & eta_fzp(:no_ele,:), eta_zp(:no_ele,:), frequencies, h_path_c,  &
20   & incoptdepth(:npc), p_path(:no_ele), .false., ref_corr(:npc),  &
21   & sps_path(:no_ele,:), tau(:npc), t_path_c(:npc), t_script(:npc), &
22   & tanh1_c(:npc), tt_path_c(:npc), w0_path_c(:npc) )
```

23 Each but one of the actual arguments has the same name as the corresponding dummy argument. (The
 24 main purpose of having this subroutine instead of just putting its body inline is to strip off the pointer
 25 attribute — which will hopefully help an optimizer here and there — and to get the dynamic bounds
 26 “built in” to the dummy argument names, so that the body doesn't need (:npc) and (:no_ele,:) throughout.)
 27 There is one argument, named PFA, that doesn't have that purpose. It's a flag that
 28 controls whether and how a small fraction of the calculations are done. It would have documentary
 29 value if I could put PFA=.false. between p_path(:no_ele) and ref_corr(:npc), without needing to
 30 put *keyword* = on the rest of the actual arguments.

31 **Estimated Impact**

32 Trivial for the standard, probably nearly trivial for implementors.

1 Detailed Specification

2 [Move C1227 to here so that the idea that a *keyword =* refers to a dummy argument is introduced before 267:9+
3 the revised C1226.]

4 C1226 (R1220) The *keyword =* shall appear if *keyword =* appears in any preceding *actual-arg-spec* in 267:10-11
5 the argument list and that actual argument does not correspond by position (12.4.1) to the
6 dummy argument named by its keyword.

7 History