25 June 2000 Page 1 of 1 **J3/00-239**

Subject: Issue 280 From: Van Snyder References: 00-195r2

1 Introduction

Issue 280 says "ALLOCATE (... SOURCE = ...) begs for an example. Here's one.

2 Edits

Edits refer to 00-007r2. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to be replaced by immediately following text, while a page and line number followed by + indicates that immediately following text is to be inserted after the indicated line. Remarks for the editor are noted in the margin, or appear between [and] in the text.

[Editor: Replace issue 280:]

103:36-38

NOTE $6.17\frac{1}{2}$

```
TYPE :: LIST ! A list of anything of extensible type
  TYPE(LIST), POINTER :: NEXT => NULL()
  CLASS(*), ALLOCATABLE :: ITEM
END TYPE POINT_LIST
TYPE(LIST), POINTER :: IN_LIST, LIST_COPY => NULL()
TYPE(LIST), POINTER :: IN_WALK, TEMP, PREV_COPY
! Copy IN_LIST to LIST_COPY
IN_WALK => IN_LIST
DO WHILE ( ASSOCIATED(IN_WALK) )
  ALLOCATE ( TEMP )
  IF ( ASSOCIATED(LIST_COPY) ) THEN
    PREV_COPY % NEXT => TEMP
  ELSE
    LIST_COPY => TEMP
  END IF
  PREV_COPY => TEMP
  ALLOCATE ( TEMP % ITEM, SOURCE = IN_WALK % ITEM )
  IN_WALK => IN_WALK % NEXT
END DO
```

This copies the list starting at IN_LIST. After copying, each element of the list starting at LIST_COPY has a polymorphic component, ITEM, for which both the value and type are taken from the ITEM component of the corresponding element of the list starting at IN_LIST.