

To: J3  
From: Malcolm Cohen  
Date: 22nd March 2001  
Subject: Interpretation request on allocatable arrays

NUMBER: 000093  
TITLE: Allocatable arrays as actual arguments  
KEYWORDS: Allocatable array, actual argument  
DEFECT TYPE: Erratum  
STATUS: J3 consideration in progress  
QUESTION:

There does not seem to be any requirement that an allocatable array be allocated for it to be used as an actual argument. Consider

```
PROGRAM P
    ALLOCATABLE A(:,:)
    CALL S(A)
CONTAINS
    SUBROUTINE S(X)
        DIMENSION X(:,:)
        PRINT *,SHAPE(X)
    END SUBROUTINE
END
```

Is this a standard-conforming program? If so, what does it print?

ANSWER:

No, this is not intended to be a standard-conforming program. An allocatable array must be allocated for it to be used as an actual argument, except where otherwise specified in the standard (e.g. for the ALLOCATED intrinsic function). An edit is supplied to clarify this intent.

EDIT:

[80:34] Change "; it" to

". It shall not be supplied as an actual argument other than as specified for intrinsic inquiry functions. It"

{Note to J3: there are quite a few of these, scattered across the early part of Ch13 so we cannot give a useful cross-reference.}

SUBMITTED BY: Malcolm Cohen  
HISTORY: 01-184 m156 Submitted

