NAG Fortran Library Routine Document

E05JAF

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of **bold italicised** terms and other implementation-dependent details.

1   Purpose

E05JAF is used to initialize the routine E05JBF.

2   Specification

```
SUBROUTINE E05JAF (N, RW, LENRW, IFAIL)
INTEGER           N, LENRW, IFAIL
double precision  RW(LENRW)
```

3   Description

E05JAF initializes the array RW for the routine E05JBF.

4   References

None.

5   Parameters

1:    N – INTEGER   *Input*

  On entry: n, the number of variables.

  Constraint: $N > 0$.

2:    RW(LENRW) – **double precision** array   *Communication Array*

  The array RW **must not** be altered between calls to any of the routines E05JBF, E05JCF, E05JDF, E05JEF, E05JFF, E05JGF, E05JHF, E05JKF and E05JLF.

3:    LENRW – INTEGER   *Input*

  On entry: the dimension of the array RW as declared in the (sub)program from which E05JAF is called.

  Constraint: $LENRW \geq 100$, see routine E05JBF.

4:    IFAIL – INTEGER   *Input/Output*

  On entry: IFAIL must be set to 0, -1 or 1. If you are unfamiliar with this parameter you should refer to Chapter P01 for details.

  On exit: IFAIL $= 0$ unless the routine detects an error (see Section 6).

  For environments where it might be inappropriate to halt program execution when an error is detected, the value -1 or 1 is recommended. If the output of error messages is undesirable, then the value 1 is recommended. Otherwise, if you are not familiar with this parameter the recommended value is 0. **When the value -1 or 1 is used it is essential to test the value of IFAIL on exit.**

6   Error Indicators and Warnings

If on entry IFAIL = 0 or −1, explanatory error messages are output on the current error message unit (as defined by X04AAF).

Errors or warnings detected by the routine:

IFAIL = 1

An input parameter is invalid. The output message provides more details of the invalid argument.

7   Accuracy

Not applicable.

8   Further Comments

The time taken by E05JAF is negligible.

9   Example

See Section 9 of the documents for E05JBF and E05JCF.