

**DEC
STANDARD
112
REV. B**

TITLE: STANDARD DATE FORMAT FOR OUTPUT

ABSTRACT: This standard ensures an unambiguous interpretation of dates by readers around the world. This format is one which is in common use throughout most of the world, is reasonably terse, is well human-engineered and is easy to produce in any computer system.

Reviewed and reaffirmed Jul 1975

DATE	ECO #	AUTHOR	APPROVED	REV	SEC	PAGES
01-Jul-75	----	P.Conklin	R.Amann	A	--	See Index
10-Feb-77	00001	J.Crittenden	<i>C. Meleke</i>	B	--	See Index

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1.0 INTRODUCTION

1.1 Motivation

1.1.1 Why Have The Standard - The "traditional" format for dates typed is aa/bb/cc. Americans treat aa as the month; the rest of the world treats bb as the month. This leads to unnecessary confusion.

1.1.2 Why Standardize Now - In 1973, we received memos from both England and Australia requesting this standard. It has been an undocumented standard practice on the -10 since 1964. It has been an unenforced standard on the -11 since 1971 (c.f. 130-003-024-001).

1.2 Goals Of The Standard

The goal is to ensure unambiguous interpretation of dates in all DEC produced software and DEC software group produced documents. As a side effect, consistency of output, and identification of the date as such will minimize the chance of misinterpreting the date.

1.3 History Of Previous Standardization Efforts

On 17-Feb-71, N. Pappas proposed this standard as document 130-003-024-00 with a much more limited scope. It was approved by the then standards committee but was never enforced. The common practice on the -10 has never been documented, and hence has been followed only by example. As new people have joined the development group, they have had to learn by osmosis or peer-group pressure, rather than by being able to refer to a standard.

1.4 Related Current Standards

ANSI has standardized the format of the date for information interchange (X3.30-1971), but this is hard for humans to read since it is a string of up to 8 digits without punctuation. In addition, it does not conform to known common human conventions in use in any major region.

ISO has also adopted a standard similar to the ANSI standard. This one allows dots to separate the components, but also rules that year be first. Although this is an improvement over the ANSI constraints, it still results in a pattern which is strange and unfamiliar to most readers.

Since computers should not appear strange, this would be a poor choice for a standard.

1.5 Future Standards Activities

A standard for inputting of dates should be defined. The -10 has such a convention.

1.6 Known Incompatibilities With Current Software

No current software will be forced to change because of this standard since no software interprets the dates output by the machine or in memos, etc.

2.0 TERMINOLOGY

No special terminology is used for this standard.

3.0 DEFINITION OF THE STANDARD

3.1 The Standard

3.1.1 Representation Of The Month - The month must be represented by either the first three letters of its English name or by its full English name. The first character must be capitalized. It is preferred, but not required, that the remainder be in lower case. Any given product must be consistent as to whether it outputs the month in its full spelling, or as a three letter abbreviation.

3.1.2 Representation Of The Year - The year is always to be represented as either a two or four digit decimal number. The two digit form is allowable only when it is unambiguous as to the century implied and when the month has been abbreviated. If the month is given in full, then the year must be given as four digits. Note that if the year is abbreviated to two digits, a leading zero if any must be preserved.

3.1.3 Representation Of The Day Of Month - The day of the month must be given as a one or two digit decimal number. It is preferred, but not required, that a leading zero be suppressed or converted to a space.

3.1.4 Representation Of The Date - Only the following three formats are allowed for the date:

1. day-month-year
2. day month year
3. month day, year

The last format requires the month and year to be spelled out in full. The first format is the preferred format for computer program output which is not constrained by other considerations. The second format is preferred for memos and letters which do not follow the first format.

3.2 Examples

Valid representations for Friday, the fourth day of January, 1974 are:

1. 4-Jan-74
04-Jan-74
4-JAN-74
04-JAN-74
4-January-1974
2. 4 January 1974
4 JAN 74
3. January 4, 1974

Invalid representations include:

1.4	
1.4/74	
4/1	
4/1/74	
1-4-74	
4-1-74	
Jan 4	
4 Jan	
4-January-74	'abbreviated year'
4-Ja-74	'too short month.'
4-Januar-74	'abbreviation not 3 letters.'
1974.1.4	'ISO'
1974.Jan.4	'ISO'