

ALGORITHM 46
EXPONENTIAL OF A COMPLEX NUMBER
JOHN R. HERNDON
Stanford Research Institute, Menlo Park, California

procedure EXPC (a, b, c, d); **value** a, b; **real** a, b, c, d;
comment This procedure computes the number, $c+di$, which
is equal to $e^{(a+bi)}$;
begin $c := \exp (a)$;
 $d := c \times \sin (b)$;
 $c := c \times \cos (b)$
end EXPC;

CERTIFICATION OF ALGORITHM 46
EXPONENTIAL OF A COMPLEX NUMBER (J. R.
Herndon, *Comm. ACM* 4 (Apr., 1961), 178)
A. P. RELPH
Atomic Power Div., The English Electric Co., Whetstone,
England

Algorithm 46 was translated using the DEUCE ALGOL compiler,
no corrections being required, and gave satisfactory results.