

623.4.023.4.028

...

,

, , . - .
: , , ,
.

$M \quad R$
 $M(x(t), y(t), z(t), t) \in R,$

“navigatio”.

$$\Phi_1(x(t), y(t), z(t), t),$$

Δ :

$$\Delta = \min \left\| \Phi_1(x(t), y(t), z(t), t) - \Phi_2(x^*(t), y^*(t), z^*(t), t) \right\|, \quad (1)$$

().

1 - ; 2 -

()

().

()

().

(,

)

[4, 7].

[11-15].

(),
(),
[10].

() [14].

(),

()

()

“ ” (,).

()

: (),
(),

() . ((,)),
“ ”,
). FNA-615,

LNS-202, -4, 15 55

“ ” “ ”

().

()

“ ”, ()

[2].

1,3%

5

(-4) [4, 7]. (-)

11, 12].

(, ,) [9, 10,

k ([13]

$$\tau_k = 1,7 \frac{\alpha}{\Delta_k v_m}, \quad (2)$$

1000–1500

α – (1,5–2).

, (), ; v_T – , / ; k – , % . 40–50 .

. 1

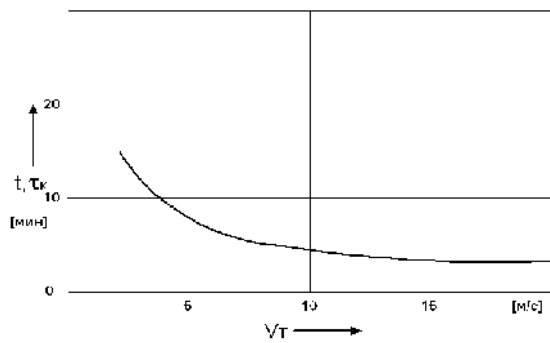
$k=1,2\%$ $\alpha = 50$

α ,

$$S = 100 \frac{\alpha}{\Delta_k} \quad (3)$$

()

[3].



. 1.

() .

“ ” ()

(), 60- 5-6

(1000) .

:

)

)

(2σ 70–100)

)

() (25-30

80–90- GPS “Navstar” , GALILEO –

4 . .),

–

,

,

–

()

)

“Navstar”

()

() ,
 :
) (S/ -) ,
 () - 100 (2σ, GPS);
) (-) ,
 - 16 (2σ). , 2,5
 , GPS.

() ,
 () ,
 , [1]. , [15].

1) ()

2)) ;

3) S/ - ;

4) -

4) ; - [16] , 25-30 ,

20 .

5) ;

[5, 6].

[13, 15].

-

3 .

().
 (GPS) .

GPS,

[1],

1.

2.

() ,

3. “ ” (-3). - , 1983. - 28 .

4. 5. -

5. // . - 2004. - 3. - . 67-71.

6. “ ” - 1998. - . V. - . 14-20.

(7. . - , 1978. - 120 .

), (8. - ;

) , 1978. - 120 .

9. - , 1966. - 304 .

7. 10. - , 1984. - 192 .

25-30 , 11. //

20 . - 1981. - 3. - . 43-47.

8. - (- , 12. системи //

9.) Космічна наука і технологія. - 2001. - Т. 7, № 4. - С. 1-5.

13. /

. // “ ” - - 2000. - . 280-283.

10. 14. // - 2002. - . 46. - . 79-96.

“ , ” 15. “ ” - - 2003. - . 218-221.

1. , 1984. - 221 .

2. , 1967. - 392 .

3. NAVSTAR . - 2007. - 68. - . 280-286. // . - 1996. - 1.

18.10.2010 p.

PERSPECTIVES AND PROBLEMS OF NAVIGATION TECHNOLOGIES EMPLOYMENT IN GROUND FORCES

V.N.Korolyov

Analysis of requirements, produced different users of Ground Forces (GF) to navigation information, and also sources of errors of its determination is conducted. Comparative estimation of tactical and technical descriptions of radio engineering and autonomous navigation systems is given. Ways of using navigation technologies in GF are analysed.

Keywords: navigation support, navigation equipment, surface moving object, navigation information.