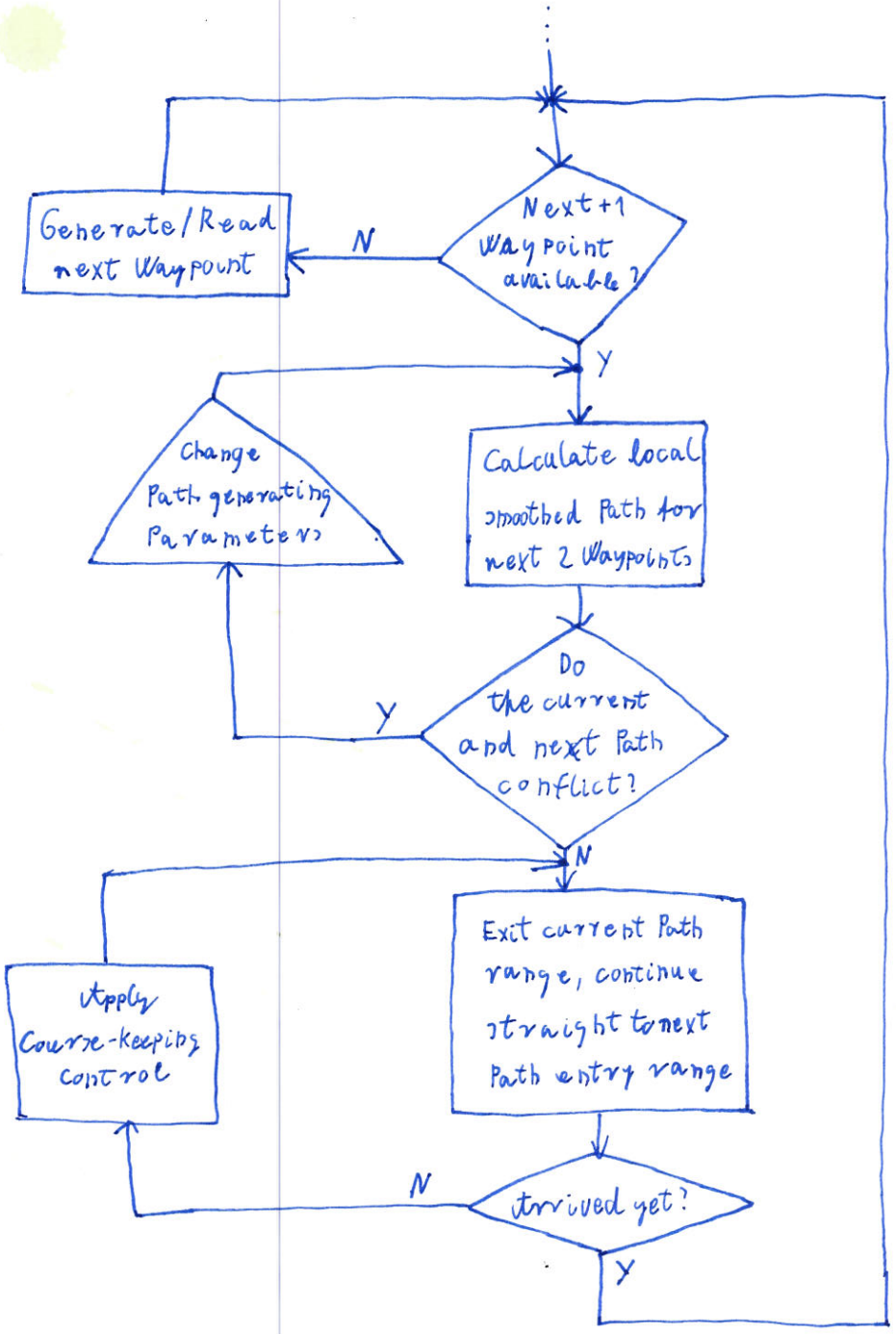
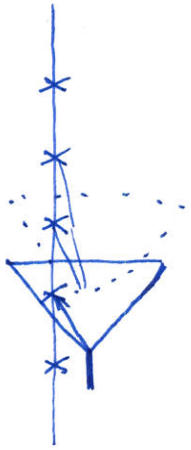
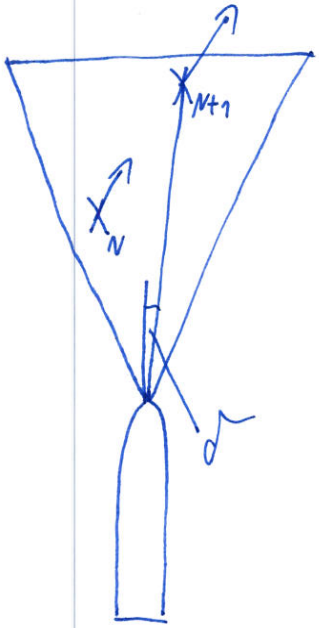
NAVIGATION

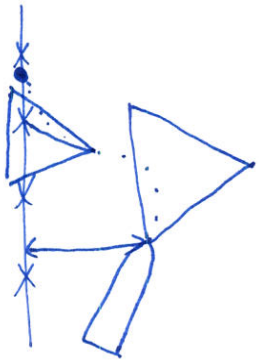


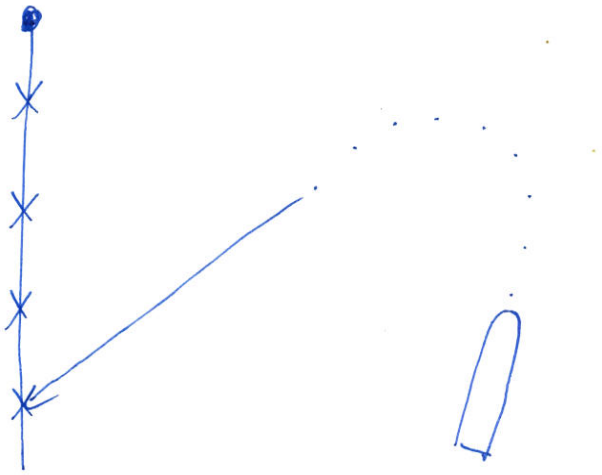
OUTDATED

Navigating along Path:



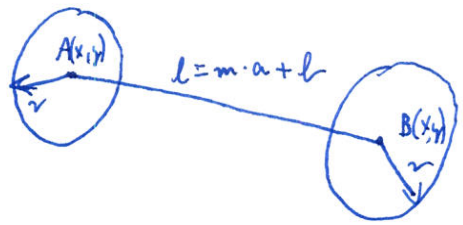




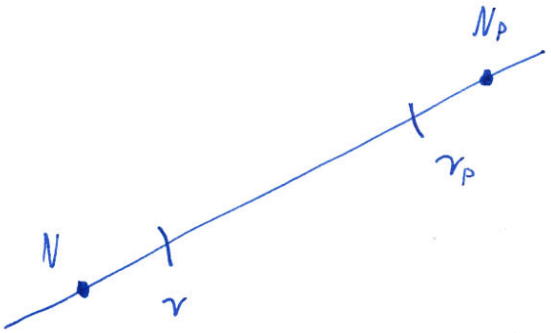


OUTDATED

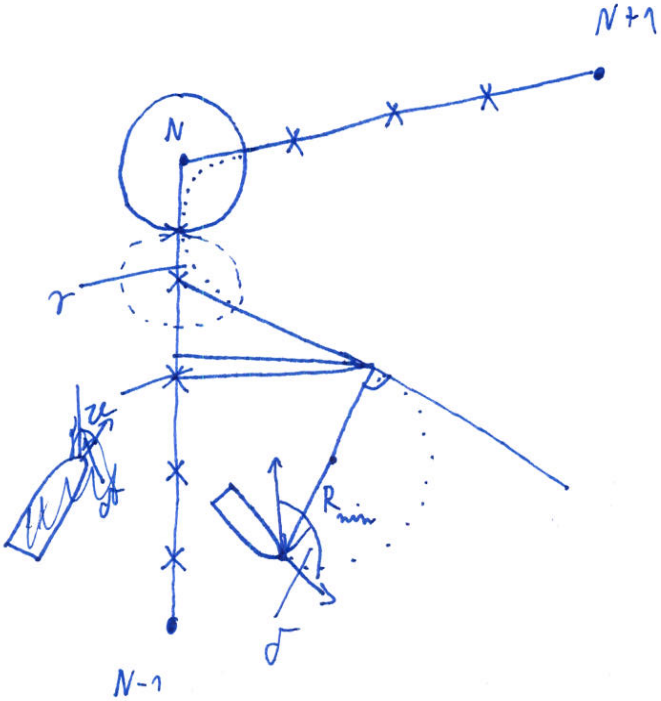
#3: Route between 2 Waypoints:

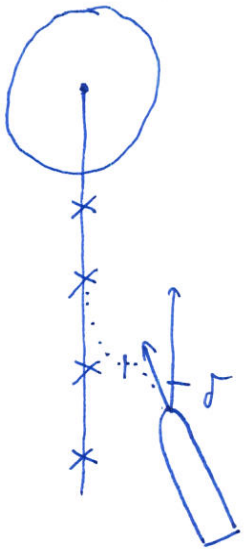


Sub - WayPoints:



#4: Deviation from Path ($\sigma < \frac{\pi}{2}$)





-1: Circular Path towards Next WP(N)

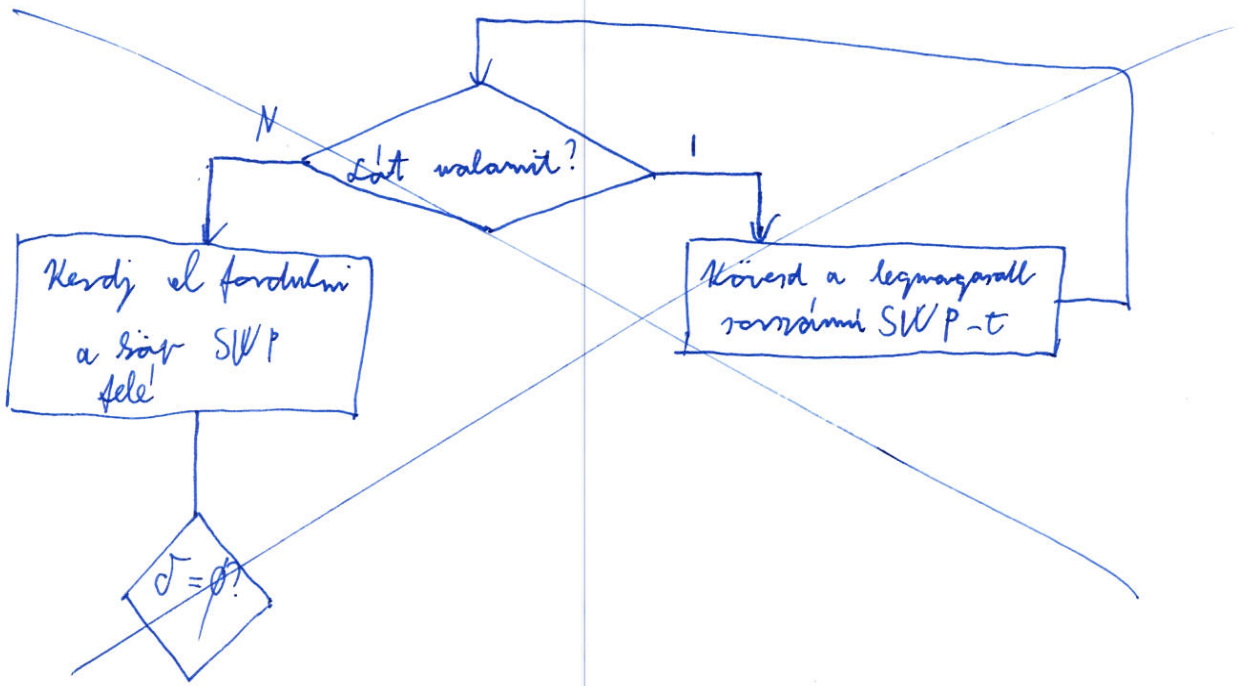
-2: When the ship faces the last sub-coordinate that is toward the next WP ($\sigma \geq \frac{\pi}{2}$ and $\alpha < \frac{\pi}{2}$) the circular path continues straight

-3: The selected sub-WP is treated as a regular WP. The WP+1 that belongs to the Path is one of the following:

- Sub-WP(n+1)
- N (if Sub-WP(n) was the last Sub-WP)
- Sub-WP+1(1) if the range of the return-Path and the range of the normal Path conflicts

-4: Continue on toward either N or N+1 depending on the solution of (-3.)

Navigáció


Lát valamit?
N
I
Kezdj el fordulni a sárga SVP felé
Követed a legnagyobb területű SVP-t
T = ∅?

Proportionality of the Euler - spiral:

$$\sigma = \frac{p_{max}}{v_{max}^2}$$

Describing equations:

if $v_{max}\, t = \frac{\kappa}{\sigma}$ ↓

$$x(t) = \sqrt{\frac{\pi}{\sigma}}\, C_F\left(\sqrt{\frac{\sigma}{\pi}}\, v_{max}\, t\right) = \sqrt{\frac{\pi}{\sigma}}\, C_F\left(\frac{\kappa}{\sqrt{\pi\sigma}}\right)$$

$$y(t) = \sqrt{\frac{\pi}{\sigma}}\, S_F\left(\sqrt{\frac{\sigma}{\pi}}\, v_{max}\, t\right) = \sqrt{\frac{\pi}{\sigma}}\, S_F\left(\frac{\kappa}{\sqrt{\pi\sigma}}\right)$$

$$\psi(t) = \frac{1}{2} v_{max}^2\, t^2 \qquad \psi(t) = \frac{\kappa^2}{2\sigma}$$

$$\kappa(t) = \sigma\, v_{max}\, t$$