





system based o the mental state

UAV less

redundant than

other planes





Marcel F. Hinss

Me:

Current Objectives

Anke Brock (ENAC)

Raphaëlle N. Roy (ISAE-SUPAERO)

ONERA

2. Physiological Computing

EEG

fNIRS

EOG

Tracking

ECG











design with **UAV Paparazzi**

(near) Future

Goals



a review article



1. UAV Pilots, Fatigue & Mishaps

implex and highly

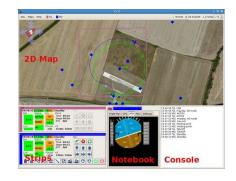
often monotonous without breaks

6-8 hour **Operations**

missions may change at any time

many tasks & many things to observe





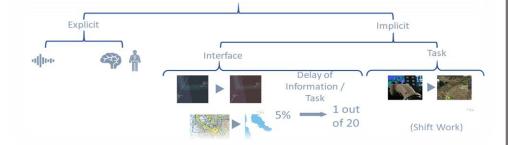
interviews with UAV operators



at ISAE-**SUPAERO**

Adaptive interaction refers to systems in which the system can initiate changes in the way the humanmachine interaction is conducted.

3. Adaptive Interaction



References

Garcia, J., Brock, A., Saporito, N., Hattenberger, G., Paris, X., Gorraz, M., and Jestin, Y.. 2019. Designing human-drone interactions with the Paparazzi UAV System. 1st International Workshop on Human- Drone Interaction,

Jahanpour, E., Berberian, B., Imbert, J.-P. & Roy, R. N. (2020) Cognitive fatigue assessment in operational settings: a review and UAS implications. In Proc. of the 3rd IFAC Conference on Cyber-Physical & Human-Systems, Beijing, China, Dec. 2020.

Roy, R. N., Bovo, A., Gateau, T., Dehais, F., & Chanel, C. P. C. (2016). Operator engagement during prolonged simulated UAV operation. IFAC-PapersOnLine 49(32), 171-176.