

[Investigation of SVS/EVS display features - Experiment condition definition]

Amy Alexander provided examples of SVS/EVS displays. These were helpful in terms of identifying major display features.

We need the following information from NASA (Kaber to secure between 12/11-1/10):

- (1) Need detailed images of SVS/EVS PFD. (What types of terrain imagery is NASA currently using?)
- (2) Need detailed images of SVS/EVS ND. (What types of terrain imagery is NASA currently using?)
- (3) Does SVS/EVS HUD and PFD present different information or are displays completely redundant?
- (4) Need examples of terrain images as part of SVS/EVS (modes) of PFD, ND and HUD (displays).
- (5) Need examples of tunnel guidance images as part of SVS/EVS (modes) of PFD, ND and HUD (displays).
- (6) Need examples of TCAS images as part of SVS/EVS (modes) of PFD, ND and HUD (displays).
- (7) Need examples of DAG-TM images as part of SVS/EVS (modes) of PFD, ND and HUD (displays).
- (8) Can SVS/EVS HUD present ND information/content?
- (9) Need to identify critical display features for PFD on initial approach, final approach, landing. (What can not be turned "off" in each phase?)
- (10) Need to identify critical display features for ND on initial approach, final approach, landing. (What can not be turned "off" in each phase?)
- (11) Need to identify critical display features for HUD on initial approach, final approach, landing. (What can not be turned "off" in each phase?)

[Experiment prototype development]

Sang-Hwan developed some example prototypes of the EVS and SVS HUDs.

- (1) In presentation of prototypes, use "full featured" vs. "full clutter"
- (2) Change "enhanced" only to EVS
- (3) Change "synthetic" to SVS

(Make changes ASAP)

In analysis of HUD features, we need to group display features according to information type/function and criticality for phase of flight instead of local display area. (Kim to do functional grouping (1/10). Cowley is to identify criticality of features (1/10).)

After January team meeting, Kim and Cowley should have necessary data to develop prototype displays for first study.

[Semantic pairs analysis]

We need to extend our analysis of the semantic pairs of clutter descriptor terms. Aptima provide a list of select pairs and major issues with the entire population of pairs. Hsiang conducted a semantic analysis of the pairs of terms.

- (1) Compare the list of pairs selected by Aptima with semantic analysis results from Hsiang. (12/8-10)
- (2) Compare major issues on semantic pairs of terms (presented by Aptima) with semantic analysis by Hsiang. (12/8-10)

We want to identify a reduced set of pairs with a high degree of orthogonality among the pairs.

[1st study procedures and interview forms]

Kaber and Hsiang will identify identify IVs and DVs for first study and develop experimental design. (1/10)

Aptima to create subjective survey forms for study. (1/10)