

#	Title	Author	Source	Jist
	THE ROLE OF ECOLOGICAL VALIDITY IN THE ABILITY TO ESTIMATE TIME-TO-CONTACT	Michael P. Manser	HFES - 1999	Human perceived Time to Contact: Object Occlusion study. We estimate TTC better if object is obstructed rather than disappearing
	UNRELIABLE AUTOMATED ATTENTION CUEING FOR AIR-GROUND TARGETING AND TRAFFIC MANEUVERING	Christopher D. Wickens	HFES - 1999	use of display techniques in Experiment 2 (with predictor wedges) did not successfully "diffuse" attention to achieve a lesser degree of overtrust and hence a more vigilant monitoring of the "raw data" of true aircraft position. It did, however, reduce workload. Both experiments point to the need for careful failure modes analysis of automation devices that may be intended to guide attention.
	USING 2-D VS. 3-D DISPLAYS: GESTALT AND PRECISION TASKS	Mark St. John, Michael B. Cowen	HFES - 1999	To summarize our findings, a single 3-D perspective view was far superior to three 2-D views for understanding the shape of the simple blocks used in Experiment 1. However, the 2-D views were far superior to two 3-D views for understanding the relative positions of two objects. We believe these results have profound implications for the design of visualization software from maps and geoplots to structural illustrations. The choice of 2-D or 3-D views, therefore, depends on the relative advantages and disadvantages of 3-D displays for conveying different types of information and which types of information a task requires.
	EFFECT OF SITUATION DISPLAYS AND AUTOMATIC ALERTS ON PILOT CONFORMANCE TO AUTOMATIC ALERTS	Amy R. Pritchett & Balázs Vándor	HFES - 1999	Results indicate that the use of both the use of automatic alerts and the type of information on traffic displays had a significant effect on when subjects judged the situation to be hazardous. An interaction between displays and alerts was also noted.
	THE ROLE OF SITUATIONAL FACTORS AND DISPLAY CUES ON	Douglas A.	HFES - 1999	examines situation factors and display cues that contribute to the
	THE USE OF PREDICTIVE DISPLAYS FOR AIDING CONTROLLER SITUATION AWARENESS	Mica Endsley, Randy Sollenberger & Earl Stein	HFES - 1999	The predictive display consisted of a window presented on the radar that displayed additional information for each aircraft in the sector that was in a transitional state, defined as those changing heading or altitude. For each, the display included the aircraft callsign, the direction of the turn and intended heading, or the direction of vertical change (climbing or descending) and the intended altitude.

WORK DOMAIN ANALYSIS FOR INTENTIONAL SYSTEMS	John R. Hajdukiewicz ¹ , Catherine M. Burns ² , Kim J. Vicente ¹ , Robert G. Eggleston ³	HFES - 1999	A WDA is presented for emergency ambulance dispatch management and military command and control to illustrate the approach.
SEPARATION MAINTENANCE IN HIGH-STRESS FREE FLIGHT USING A TIME-TO-CONTACT-BASED COCKPIT DISPLAY OF TRAFFIC INFORMATION USE OF COGNITIVE WORK ANALYSIS ACROSS THE SYSTEM LIFE CYCLE:	William Knecht and Peter Hancock Penelope Sanderson	HFES - 1999 HFES - 1999	New metrics of separation maintenance were developed. Results indicated performance gains for the CDTI that automatically calculates and displays conflict-alerting information. Recommendations are made for advanced avionics for use in free flight.
AUTOMATION USE AND AUTOMATION BIAS	Kathleen L. Mosier, Linda J. Skitka	HFES - 1999	These findings suggest that in decision making contexts such as the glass cockpit, in which non-automated cues may not be equal in salience to cues from automated sources, people are failing to seek out either confirming or disconfirming evidence before making a choice to act. Overall, these results suggest both omission and commission errors share the same psychological dynamics – at the core of the problem is decreased situational awareness and vigilance. This implies that if designers of systems expect operators to attend to all information available to them, they need to design sources of information to be equally salient and available. The awareness of such dynamic situation imply both to identify other's current action, and to anticipate their intentions. Through two studies, results confirm the building process underlying operator's situation awareness during the activity and presents new requirements for the future embarked information systems
INTENT RECOGNITION AND SITUATION AWARENESS	Sophie Dusire & Christophe Munduteguy	HFES - 2000	explores the use of conjoint analysis as a measure of the subjective evaluation of clutter on avionics displays. Waypoints are found most cluttering among CDTI elements
1518 Visual Display Screen Clutter Metrics SITUATION-ADAPTIVE AUTONOMY: DYNAMIC TRADING OF 1311 AUTHORITY	Daniel McCrobie	HFES - 2000	
DESIGNING HEAD-UP DISPLAYS (HUDs) TO SUPPORT FLIGHT 336 PATH GUIDANCE	Toshiyuki Inagaki Patricia May Ververs Christopher D. Wickens	HFES - 2000 HFES - 2000	only truly conformal symbology can combat the effects of cognitive tunneling.

1191	PUTTING FOUR DIMENSIONS IN "PERSPECTIVE" FOR THE PILOT WHEN AND HOW OF USING 2-D and 3-D DISPLAYS FOR	K. Krishna Christopher D.	HFES - 2000	Time-Space and 'cone' displays for collision detection
1533	OPERATIONAL TASKS	Wickens Mark St. John and	HFES - 2000	Useful for Visualization of ownship and traffic
335	DESIGNING FOR THE TASK: SOMETIMES 2-D IS JUST PLANE BETTER	Harvey S. Smallman Richard P.	HFES - 2000	2-D displays are often sufficient for taskl.. Compares 2-D and 3-D displays
1409	TIME-TO-CONTACT ESTIMATES FOR OBSERVER	Grutzmacherl, Brian F. Gore	HFES - 2000	Time to Contact study to determine human perception effectiveness
1504	VALUE OF HUMAN PERFORMANCE COGNITIVE PREDICTIONS: A FREE FLIGHT	&Kevin M. Corker Patricia May Ververs, Michael C. Dorneich, Michael	HFES - 2000	Good sources for Conflict Detection papers
3	ALERTING AND NOTIFICATION OF ADVERSE CONDITIONS- ESCAPE AND AVOIDANCE	D. Good	HFES - 2001	Refined ANCOA alerts consolidation display
16	ALTERNATIVES FOR AIR TRAFFIC CONTROL DISPLAYS	Tanya Yuditsky, Narinder Taneja and Douglas A.	HFES - 2001	ATC display redesigns, wrt. Altitude, airports, etc..
20	ANALYSIS OF MID-AIR COLLISIONS IN CIVIL AVIATION	Wiegmann	HFES - 2001	Good NMAC references and stats
25	THE ARC-SIZE ILLUSION AS APPLIED TO PLANAR DISPLAYS	Doreen Comerford, John Helleberg and Christopher D.	HFES - 2001	Interesting CDTI Predictor path design experiments
30	AUDITORY VS. VISUAL DATA LINK: RELATIVE EFFECTIVENESS	Wickens Amy L. Alexander	HFES - 2001	Implications for designing visual/aural cues in the cockpit
43	COCKPIT DISPLAY OF TRAFFIC INFORMATION: THE EFFECTS OF TRAFFIC LOAD,	and Christopher D.Wickens	HFES - 2001	CDTI study on 2D coplanar, 3D schemes for presenting traffic and collision information
60	head-down, and head-up highway-in-the-sky primary flight displays	Dennis B. Beringer and Jerry D. Ball	HFES - 2001	HITS using headdown headsup, display experiments for effectiveness
87	DESIGNING SITUATION DISPLAYS TO PROMOTE CONFORMANCE	Amy R. Pritchett and Bal_izs Vfindor	HFES - 2001	Interesting Comparison of Alerting mechanisms to automatic alerts
162	EVALUATION OF CDTI DYNAMIC PREDICTOR DISPLAY TECHNOLOGY	Walter W Johnson James M. Hitt II,	HFES - 2001	Experiment of Predictor Symbols for CDTI, pulsing vs. static predictor lines and effectiveness
255	KNOWLEDGE OF AND ATTITUDES TOWARDS AUTOMATION AMONG Pilots	Florian Jentsch, and Clint Bowers	HFES - 2001	Subjective impressions by pilots of FMS (flight mgmt systems)

263 LOCALIZATION OF AIRCRAFT ON AN ELECTRONIC NAV DISPLAY USING VERBAL	Douglas A. Peterson and Pamela J. Maas	HFES - 2001	Useful for CDTI design, comments on verbal integration to detect intruder positions
287 MODELING THE BIG SKY THEORY	William R. Knecht	HFES - 2001	Useful abst hierarchy paper, flight dynamics parameters for free flight
344 The Role of 2-D and 3-D Task Performance	James S. Tittle*	HFES - 2001	Non aviation investigation of 2D vs 3D
359 A SIMULATOR STUDY OF PILOTS' MONITORING STRATEGIES	Randall J. Mumaw 1, Mark I. Nikolic 2, Nadine B. Sarter 2, Christopher D. Wickens	HFES - 2001	Interesting paper on how pilots do not fully understand automation and what its doing, hence not monitoring them appropriately
105 DOES WORKLOAD MODULATE THE DIFFERENCE BETWEEN COCKPIT TRAFFIC DISPLAY FORMATS	Amy L. Alexander and Christopher D. Wickens	HFES - 2002	Effects of workload levels on maneuvers in 2D coplanar and 3D displays
112 ECOLOGICAL INTERFACE DESIGN IN AVIATION DOMAINS:		HFES - 2002	Abst Hier in Aviation domain, AIDL It was found that there was an improvement in target detection performance when participants were informed ahead of time which intensity level - bright or dim - to focus their attention on when searching for a target. This supports the idea that top- down processing aids search and detection performance.
153 Effects of Symbol Brightness Cueing on Attention	Walter W. Johnson, Nathan R. Bailey	HFES - 2002	Useful for CDTI design, where horizontal and vertical velocity estimations and perception are discussed
215 THE HORIZONTAL-VERTICAL VELOCITY ILLUSION:	Mark W. Scerbo	HFES - 2002	
234 THE IMPACT OF COMMUNICATION DELAYS ON	Esa M. Rantanen, Jason S. McCarley, and Xidong Xu	HFES - 2002	Communication delay (speech delay) and its implications on directing planes on routes.. Interesting for TCAS instruction calls to pilots
270 TEXTURED SURFACES AND SELF-MOTION:	Patricia R. DeLucia, Les E. Meyer, Jason M. Bush	HFES - 2002	Fancier textured objects (instead of wireframe models) do NOT improve self motion and collision perceptions
311 NASA SYNTHETIC VISION EGE FLIGHT TEST	Lawrence (Lance) J. Prinzel, Lynda J. Kramer, J. Raymond Comstock,	HFES - 2002	HUDs do work for improved flight precision Tunnel in the sky: dynamic tunnel paths help with precision maneuvers
chadic 3-D Perspective Displays for Guidance	Chad Jennings,		

uw1	The optimal control of collision avoidance trajectories	John C. Clements	Transportation Research Part B 33 (1999)	265±280	Heavily mathematical formulation of collision avoidance flight paths
uw2	Neural Nets Trained by Genetic Algorithms for Collision Avoidance	NICOLAS DURAND AND JEAN-MARC ALLIOT	Applied Intelligence 13, 205–213, 2000 Control Eng Practice, Vol. 4, No. 8. Pp. 1169- 1175, 1996 Int. J.		Genetic Algorithms for Calculating non-conflicting optimal evasive paths
uw3	Automatic Collision Avoidance Based on Supervised Predictive Controllers	R. Asep, A.K. Achaibou, F.Mora- Camino	Human}Computer Studies (2000)		Collision Avoidance as a control system problem solving model
uw8	Navigation strategies with ecological displays	CATHERINE M. BURNS Stelios P. Pispitsos, Marcello R.	52, 111}129		EID spatial/temporal distancing and navigation effects
uw9	Developing tools for reconstructing control signals	Napolitano*, Brad Seanor	Aircraft Design 3 (2000) 175}203 Int. J. Human- Computer Studies (1999) 51,		training neural networks with airplane sensor parameters for crash investigation. Useful for abst hierarchy
uw13	Does automation bias decision-making?-	LINDA J. SKITKA	991}1006		Very good paper on automation bias and accidnets arising from