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Stress and Military Performance

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Summary of Effects of Selected Stressors

STRESSOR	MAJOR EFFECTS
Danger/Threat/Loss of Control	Subjective anxiety Freezing; escape from situation, reduced motivation Performance decrements (sometimes due to haste); memory decrement
Sleep Deprivation CONOPS/SUSOPS	Effects seen with 18-24 hours of sleep deprivation Long and boring tasks most vulnerable Cognitively complex and high workload tasks more vulnerable Attention lapses, perceptual focus narrows, performance more variable, timing accuracy decreases, complex psychomotor skills degrade, loss of discrimination about task priorities
Workload Time Pressure	Speed up processing Limit information scanning; focus on selected information Working memory disrupted; decision strategies shift Restricted number of team members participate in decision process
Information Load	Restricted information search; less information used in decisions Greater risk taking
Noise	Depends on whether variable or continuous Continuous: Disrupts continuous attention; increases attention selectivity; disrupts memory component of complex tasks Variable: May increase alertness
Heat	Long duration: Cognitive confusion; impaired attention, memory, judgment, complex calculation; piloting skills disrupted
Cold	Slowing of responses, loss of manipulative ability (hands); little effect on cognitive tasks
Altitude	Impaired concentration and acquisition of new information

Predicted Effects of Various Training Approaches on Each Type of Stressor

STRESSOR	TRAINING APPROACHES		
	STRESS REDUCTION	SKILL TRAINING	CRM-TYPE TEAM TRAINING
Danger/Threat/Loss of Control	XXX	XX	X
Sleep Deprivation CONOPS/SUSOPS	---	X	XX
Workload Time Pressure	X	XX	XX
Information Load	X	X	X
Noise	---	X	X
Heat	---	---	X
Cold	---	---	X
Altitude	---	---	