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**ABSTRACT**

<b>Title: ACCELERATION SYMPTOMS IN MILITARY PILOT TRAINEES</b>						
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<b>Objectives:</b> The aim of the study was to evaluate the incidence of acceleration induced symptoms (Grey out, Tunnel vision, Black out, GLOC, cervical pain, motion sickness and cough) in pilot trainees in Hellenic Air Force.						
<b>Methods:</b> An anonymous questionnaire was filled in by three pilot trainee groups with increasing flight experience, chosen from the Military pilot cadet school. The first group consisted of 3 <sup>rd</sup> grade students who had just finished basic flight training with the T-6A aircraft (Basic Group). The second group were all 4 <sup>th</sup> grade students who had completed the advanced flight training (Advanced Group) with the T-2 aircraft, while the third group consisted of 2 <sup>nd</sup> Lieutenants who were about to finish operational training with the T-2 aircraft (Operational Group). We gathered 37 questionnaires from the Basic Group, 50 from the Advanced Group and 48 from the Operational Group.						
<b>Results:</b> The results of the study are summarized in the following table:						
Incidence of in-flight acceleration induced symptoms						
	Basic Group (37 cadets)		Advanced Group (50 cadets)		Operational Group (48 cadets)	
Grey out	19	51%	24	48%	44	92%
Tunnel Vision	18	48%	19	38%	35	73%
Black out	9	24%	11	22%	13	27%
GLOC	2	5%	1	2%	0	0%
Cervical pain	6	16%	17	34%	17	35%
Motion Sickness	10	27%	7	14%	8	14%
Cough	4	11%	19	38%	14	29%
Additionally, 78% (29 cadets) from the Basic Group reported having experienced the above symptoms when the instructor pilot was in control of the aircraft. The results from the Advanced Group and the Operational Group were 72% (36 cadets) and 73% (35 cadets) respectively.						
<b>Conclusions:</b> The most common acceleration induced symptom for all Groups is loss of color vision (Grey out), followed by tunnel vision. Cervical pain and cough are reported more often in pilot trainees flying the T-2 aircraft, while motion sickness is more common in early stages of flight training. The increase of Grey out and Tunnel vision reporting in the Operational Group can be attributed to the increasing difficulty of sorties in this training phase. The fact that GLOC is rarely reported, supports the already established notion that T-2 and T-6A aircrafts are safe flight training tools. The finding that acceleration symptoms occur more often when the pilot is not in control of the aircraft is in accordance with relevant literature.						
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