



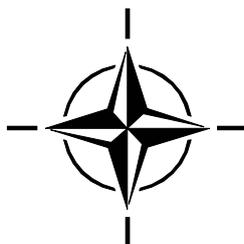
RTO AGARDograph

AG-HFM-152

Survival at Sea for Mariners, Aviators and Search and Rescue Personnel

(Survie en mer pour les marins, les aviateurs et
le personnel de recherche et de sauvetage)

This is the final compilation of the lecture notes, written specifically for
the HFM-152 Technical Course on 'Survival at Sea for Mariners,
Aviators and Search and Rescue Personnel', presented
in Belgium and Portugal in June 2007.



Published February 2008





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- NMSG NATO Modelling and Simulation Group
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Preface

This technical course was conceived seven years ago and first presented in the U.S.A., Germany and Spain in 2003. This was most successful and repeated in the Netherlands and Latvia in 2005. This AGARDograph was produced for the recent course that was held in Belgium and Portugal in June 2007. I would like to thank all my colleagues who assisted in the compilation of this document.

Technical Course HFM-152

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Ditching (landing)	Lifejacket	Swimming failure	
Drowning	Marine safety equipment	Thermal manikins	
Escape (abandonment)	Military planning	Thermal models	
Escape systems	Non-freezing cold injuries	Thermoregulation	
Fitness for marine operations	Rescue operations	Totally Enclosed Motor-Propelled Survival Craft (TEMPSC)	
Flight crews	Search and rescue	Water entry	
Helicopters	Seasickness		
Human factors engineering			
14. Abstract			
<p>This AGARDograph summarizes the current scientific knowledge of sea survival for mariners, aviators, search and rescue technicians and medical staff. The text discusses key issues such as drowning through cold shock and swimming failure induced by immersion in water particularly below 15°C, survival prediction curves and non-freezing cold injuries. It emphasizes the importance of integrating good human engineering practices at the beginning of a project involving survival equipment such as lifejackets, life rafts and lifeboats. Manikin testing to evaluate survival suit insulation is described. The latest helicopter ditching statistics and helicopter underwater escape protocols are presented. Practical advice is given on the causes and treatment of seasickness. Finally a discussion is had on the importance of understanding how humans mentally process information under stress and why this should be included in every survival school curriculum.</p>			





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