

Human Performance Optimization (HPO) in the Danish Special Operation Forces

Perspectives for High-speed Boat Operations

Lieutenant Commander "BUTLER" (PhD, MSc, BSc)
The Frogman Corps
Danish Armed Forces
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Background HPO INTERNATIONALLY

"Humans are more important than hardware"



"NATO have identified the development of HP programs for SOF as a critical requirement"



UNITED STATES SPECIAL OPERATIONS COMMAND

OFFICE OF THE CHIEF OF STAFF 7701 TAMPA POINT BLVD. MACDILL AIR FORCE BASE, FLORIDA 33821-5323

> JAN 17 2019 POLICY MEMORANDUM 18-35

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: U.S. Special Operations Command Policy for Mandatory Participation in Human Performance Program

 Purpose. This policy memorandum (PM) directs the minimum mandatory participation of all U.S. Special Operations Command (USSOCOM) personnel in the Human Performance (HP) Program. It provides the implementation guidance and procedures for use of the HP program and

directs data collection and reporting in accordance with (IAW) existing guidance.



HOLISTIC HEALTH AND FITNESS (H2F)

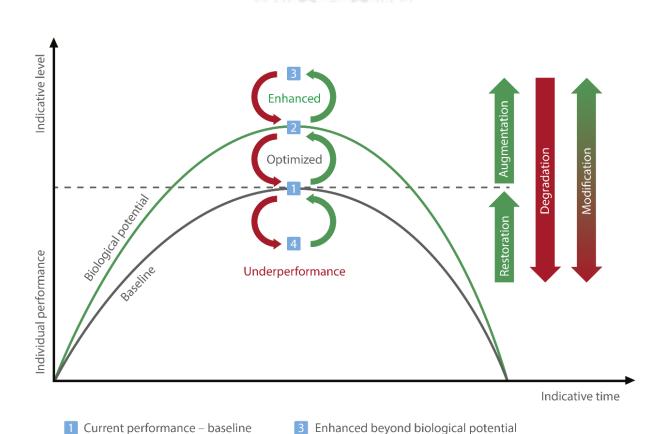
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NSHQ



Background HPO

2 Optimized up to biological potential



4 Underperformance



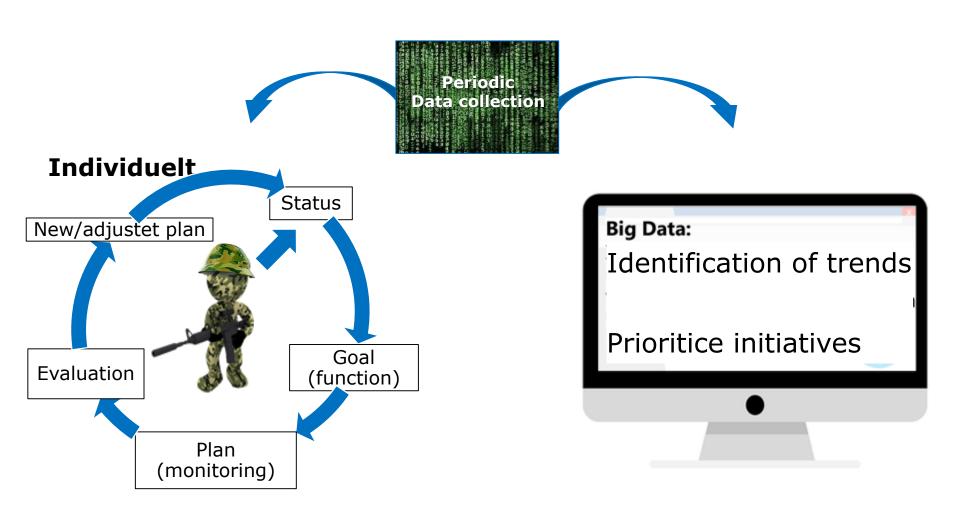
Background HPO



- Based on facts/data
- Systematised
- Koordinatet (multi disciplinary) UNCLASSIFIED



Background HPO





Danish SOF HPO Project

Develop HPO program to:

- Optimize operative performance (mental & physical)
- Reduce number, impact & duration of injury, pain- and stress incidenses
- ⇒ Reduce absence from active duty
- ⇒ Increase retention
- ⇒ Decrease negative long term effects of duty on health and wellbeing

- for all personnel

Furhtermore:

- Optimize recruitment, selection and on-board training
- Adjust this chain with technological development and change in operational complex







HPO Project Plan



Fase 1: Establish foundation - baseline

2020 2021 2022 2023 2024 2025 2026 2027 ...

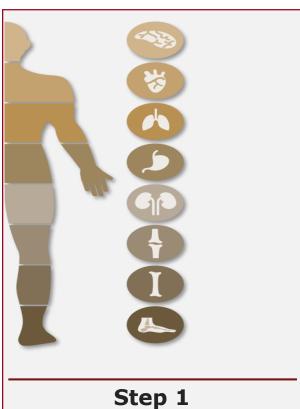
Fase 2: Scale up – test initiatives

Fase 3: Estableshing Concept

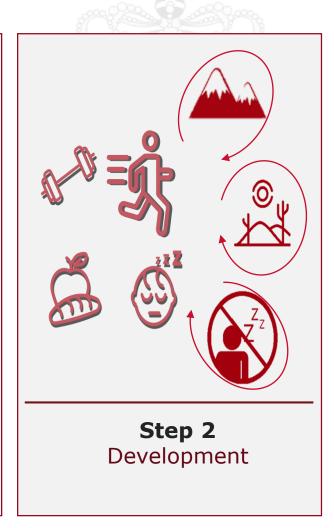




Science collaboration - Academia

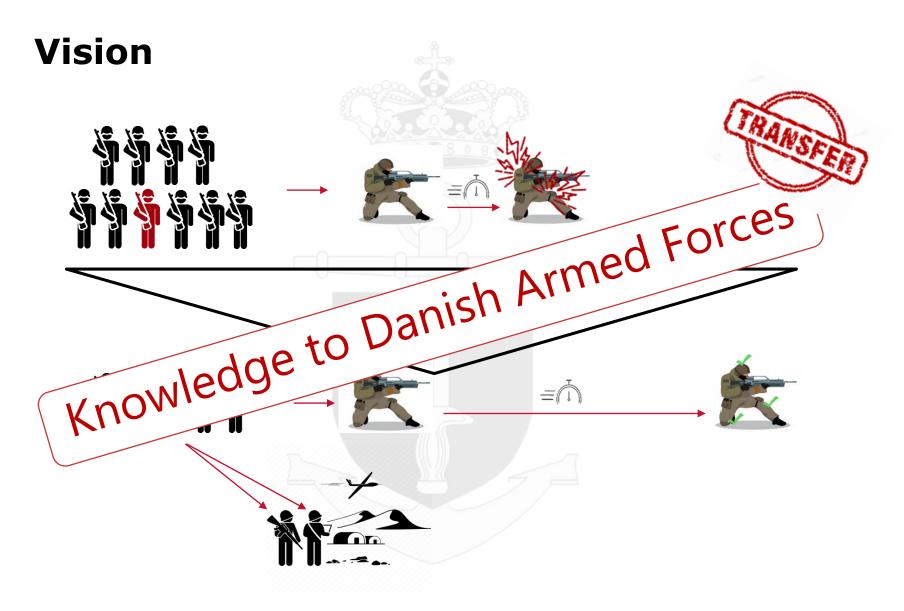


Baseline Screening/evaluation













Perspectives for High-speed Boat Operations



SCIENCE AND TECHNOLOGY ORGANIZATION COLLABORATION SUPPORT OFFICE

Activity chair: Prof Stephen Myers (GBR)

Members: USA, NOR, NLD, BEL, CAN, GBR, ITA,

PRT, FRA, USA, DNK

Partners: SWE, AUS, NZL, IRL

Duration: AUG 2020 - OCT 2024

Coordination: NNAG, CMRE

Related activities: HFM ET-183

Objectives:

 Protect all personnel onboard High-Speed Boats from injuries caused by exposure to whole body impacts

Mentor: Yohan Robinson (SWE)

RTG-433: Human Impact Exposure onboard High-Speed Boats

- · Strengthen physical combat capacity
- Establish which levels and what kinds of impacts cause acute injuries and which reduce physical combat capacity
- · Define recommendations for new relevant exposure limits
- Specify smart signalling solutions of expected high impact related to current weather and sea conditions

Topics covered:

- · Epidemiology of occup. hazards onboard high-speed boats
- · Safe ride standards for high speed boats

Exploitation and impact:

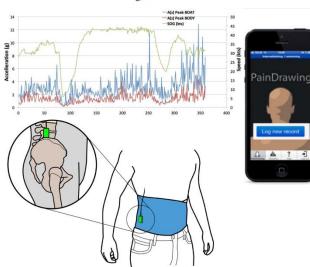
- Establish limits for exposure to discrete and cumulative impacts
- Define a relevant unit for measuring and quantifying whole body impact exposure.
- Define, for each boat type, recommended hull-exposure limits to keep personnel safe and fit for mission
- Specify and calibrate dashboard displays, indicating in real-time, Safe - Risky - Dangerous levels of exposure.

Status:

Approved

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TAKE HOME MESSAGES

- Data collection
- Sharing knowledge and experience
- Long term development

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