PHYSICAL FITNESS STANDARDS AND PROGRAMS FOR THE CANADIAN FORCES
A CANADIAN FORCES PERSPECTIVE FOR
CISM INTERNATIONAL SYMPOSIUM
by
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OPERATIONAL PHYSICAL FITNESS
RESEARCH AND DEVELOPMENT OF CF PHYSICAL FITNESS STANDARDS (CFAO 50-1)

• Cannot be based on arbitrarily set pass/fail criteria
• Measurement tools and standards shall meet appropriate scientific criteria and military performance requirements
• Shall be researched to ensure that they are safe, appropriate and scientifically validated
CF EXPRES PROGRAM

SCIENTIFIC AND HUMAN RIGHTS UMBRELLA

STANDARDS PROGRAMS

UNIT/INDIVIDUAL TRAINING
CF EXPRES PROGRAM

MAINTENANCE STANDARDS

GENERAL

ENVIRONMENTAL

TRADE
CF EXPRES PROGRAM

SELECTION STANDARDS

GENERAL
- Recruit Applicants

TRADE
- SAR Techs
- PARA
- JTF
- Divers
- FF
- Rangers
PHYSICAL FITNESS MAINTENANCE STANDARDS
RATIONALE FOR THE DEVELOPMENT OF BONA FIDE PHYSICAL FITNESS STANDARDS FOR CANADIAN FORCES

SAFETY
COST-EFFECTIVENESS
VALIDITY & RELIABILITY
USER SATISFACTION
HUMAN RIGHTS LEGISLATION
BONA FIDE OCCUPATIONAL REQUIREMENTS (BFOR)
OBJECTIVE BASIS OF BFOR

Must consider existing:

- scientific data
- empirical studies
- expert opinion
- detailed nature of duties to be performed
- conditions existing in the workplace
PURPOSE OF STANDARDS

- Assess physical operational readiness;
- Take corrective action for the unfit by providing programs;
- Determine effectiveness of training programs; and
- Act as goals for all personnel.
WHAT DO STANDARDS GIVE US?

- Reasons for training
- Achievable goals
- Rationale for facilities and staff to support the programs
- Operational function measurement
DEVELOPMENT OF TEST OR TEST BATTERY

Need to establish job-relevance
Can be established through content, construct or criterion validation
A given measure is valid to the extent that it corresponds to, or predicts, the human behavior of interest
LAWS AND GUIDELINES FOR OCCUPATIONAL REQUIREMENTS

Canada

Legislated
Federal/Provincial

Human Rights Commission
MPFS 2000 Common tasks

1. Entrenchment
dig

2. Land
Evacuation
MPFS 2000 Common Tasks

3. Low High Crawl

4. Sandbag Carry
MPFS 2000 Common Tasks

5. Sea Evacuation

6. Jerry can Lift
Maintenance Standards

Purpose is to evaluate incumbents

Selection Standards

Purpose is to select the best or most appropriate candidates for training

It is recommended that applicants be held to a higher std because of an abundance of evidence that fitness decreases with age and higher levels of fitness translate to better performance at reduced risk.
MODEL FOR THE DEVELOPMENT OF BONA FIDE PHYSICAL MAINTENANCE STANDARD
Literature Review

Physical Demands Analysis
Literature Review

Physical Demands Analysis

Identification of "Most Demanding" and "Most Representative" tasks

Expert Panel
Literature Review

Physical Demands Analysis

Identification of “Most Demanding” and “Most Representative” tasks

Expert Panel

Circuit
Literature Review

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Scientific Check
Literature Review

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Reliability

Fitness test vs Circuit
Literature Review

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Physiological Evaluation

Fitness test vs Circuit

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Physiological Evaluation

Approve Circuit

Reliability

Fitness test vs Circuit
Literature Review

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Circuit

Scientific Check

Physiological Evaluation

Approve Circuit

Reliability vs Circuit

Fitness test vs Circuit

Checks on Segments of the CF

Evaluate Age and Gender Effects
Literature Review

Physical Demands Analysis

Identification of “Most Demanding” and “Most Representative” tasks

Expert Panel

Circuit

Scientific Check

Physiological Evaluation

Approve Circuit

Develop Performance Objectives

Reliability

Fitness test vs Circuit

Checks on Segments of the CF

Evaluate Age and Gender Effects
TASK RELATED MODEL (Task Simulations/Work Samples)

ADVANTAGES
- easily understood
- job related/specific
- operational capability measurement
- discriminates well between who can/cannot do the job
- perception of reduced redress of grievances/challenges

DISADVANTAGES
- skill and fitness may be confounded
- may be dependent upon prior learning/skill
- does not measure physical fitness
PREDICTIVE TESTS MODEL  
(Physical Fitness)

**ADVANTAGES**
- measures physical fitness
- is not dependent on prior learning

**DISADVANTAGES**
- requires more effort to document job relatedness
- does not discriminate well between who can/cannot do the job
- perception of increased redress of grievances/challenges
MODEL
FOR ESTABLISHING
PHYSICAL FITNESS
TRAINING PROGRAMS
Aerobic Power
13km March
2hr 26min 20s
Upper Body and
Core Strength

Aerobic Power
Casualty Evacuation
100m < 60s
Upper Body and
Core Strength

Upper Body and
Core Strength
Ammo box Lift
48 boxes in
300s

Upper Body and
Core Strength
Trench Dig
.486 cubic m < 6 min

Flexibility
Lower body
Strength

Lower body
Strength
A MODEL TO LINK ARMY FITNESS PROGRAMS TO GOALS AND OBJECTIVES

PROGRAMS

1. Aerobic Power
   2400m < 10.5 min
2. Aerobic Capacity
   5 km < 25 min
3. Lower Body Strength
   Squats: 80 kg X 14
4. Upper Body Strength
   Bench Press: 65 kg X 22
5. Abdominal Core
   Curl ups X 75
6. Lower Body Power
   Long Jump: 250 cm
   40m sprint: 5.6 s
7. Flexibility
   (see AFM for details)

FITNESS OBJECTIVES

13 km March
24.5 kg < 2 hr:26 min:20 s
Casualty Evacuation
100 m < 60 s
Ammunition Box Lift
20.9 kg X 48 < 5 min
Trench Dig
.486 cu. m < 6 min

(see AFM for details)

THE ARMY FITNESS PROGRAMS
- Garrison
- Field
- Rapid Deployment
- 6 Week
- 3 Week
(see AFM for details)

AFM - Army Fitness Manual
PF Testing at Recruit Centers

All applicants are provided:

`Applicant Physical Fitness Testing`

and/or

`Failing to Prepare is Preparing to Fail`

Those selected are tested using the MPFS test
The EXPRES Programme Training Guides

- Nautilus
- Cross-Country Skiing
- Cycling
- Jogging
- Rope-Skipping
- Stationary Cycling
- Strength and Muscular Endurance
- Swimming
- Walking

To view the contents of a booklet click on the walking booklet, otherwise select continue
Exercise Prescription

Environment specific exercise prescription material
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JTF 2 Pre-Selection

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Canadian Forces Fitness Model

MPFS (FIT) 2000

- Time for Physical Training
- Fitness Equipment
- Pension Coverage
- Access to Fitness Facilities
- Qualified Staff
- Exercise Prescription Material
- Leadership Support
- Clear Administrative Policy
Fitness Programs and Standards for Today’s Canadian Forces Members

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