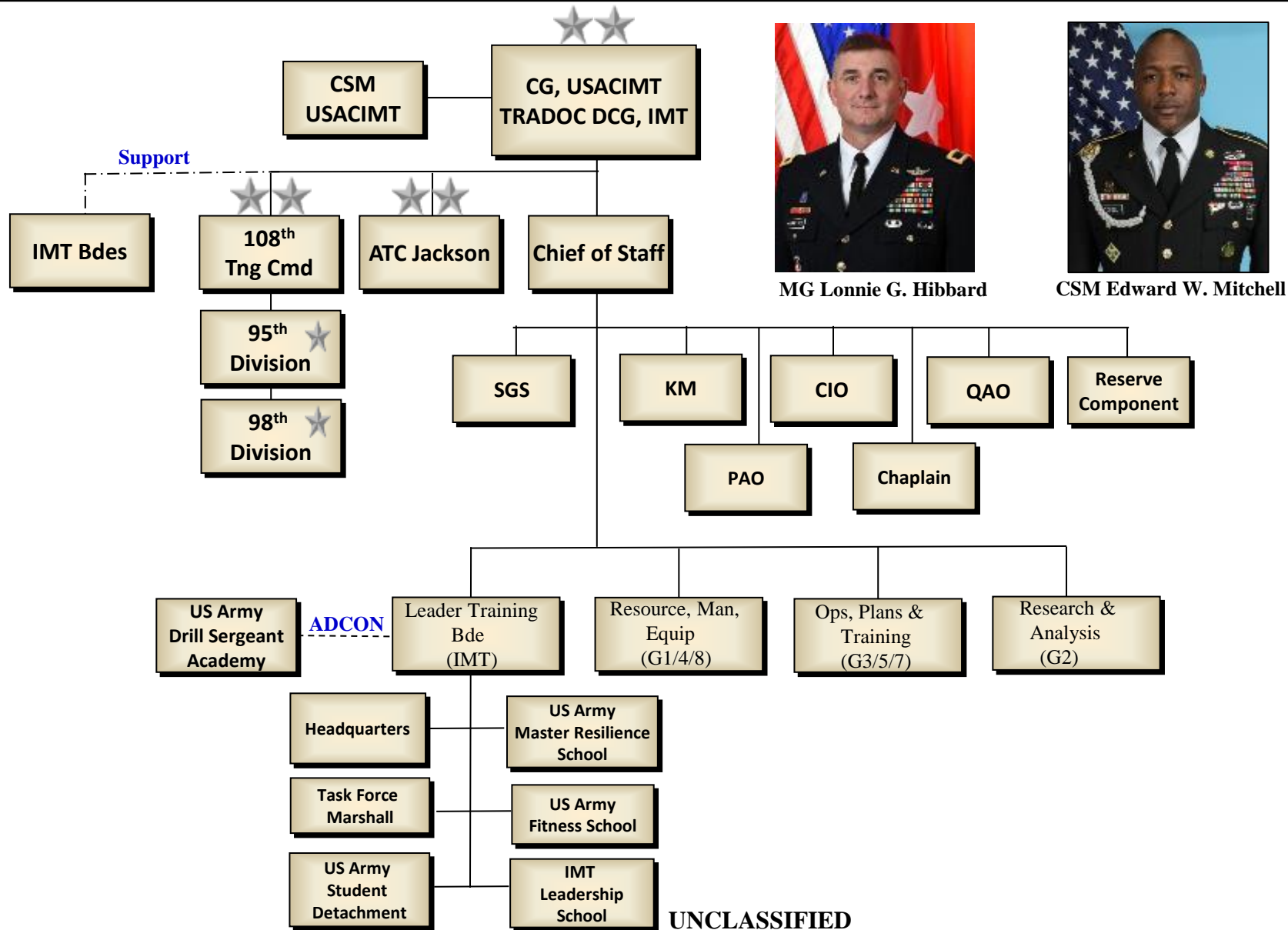




Revolutionizing training and preparation for Multi-Domain Operations through, Holistic Health and Fitness, the new Army Combat Fitness Test and other initiatives out of the Center for Initial Military Training

Mr. Michael S. McGurk
Director
Research and Analysis
U.S. Army Center for Initial Military Training - TRADOC
Fort Eustis, Virginia



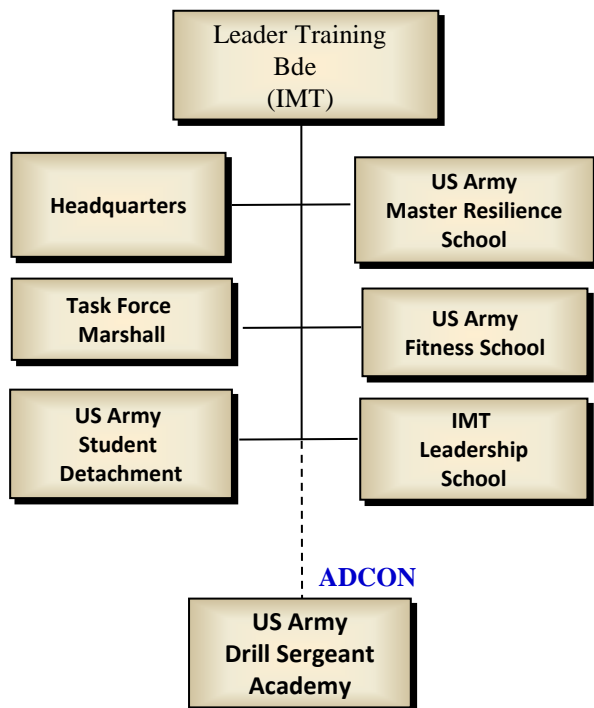
MG Lonnie G. Hibbard



CSM Edward W. Mitchell

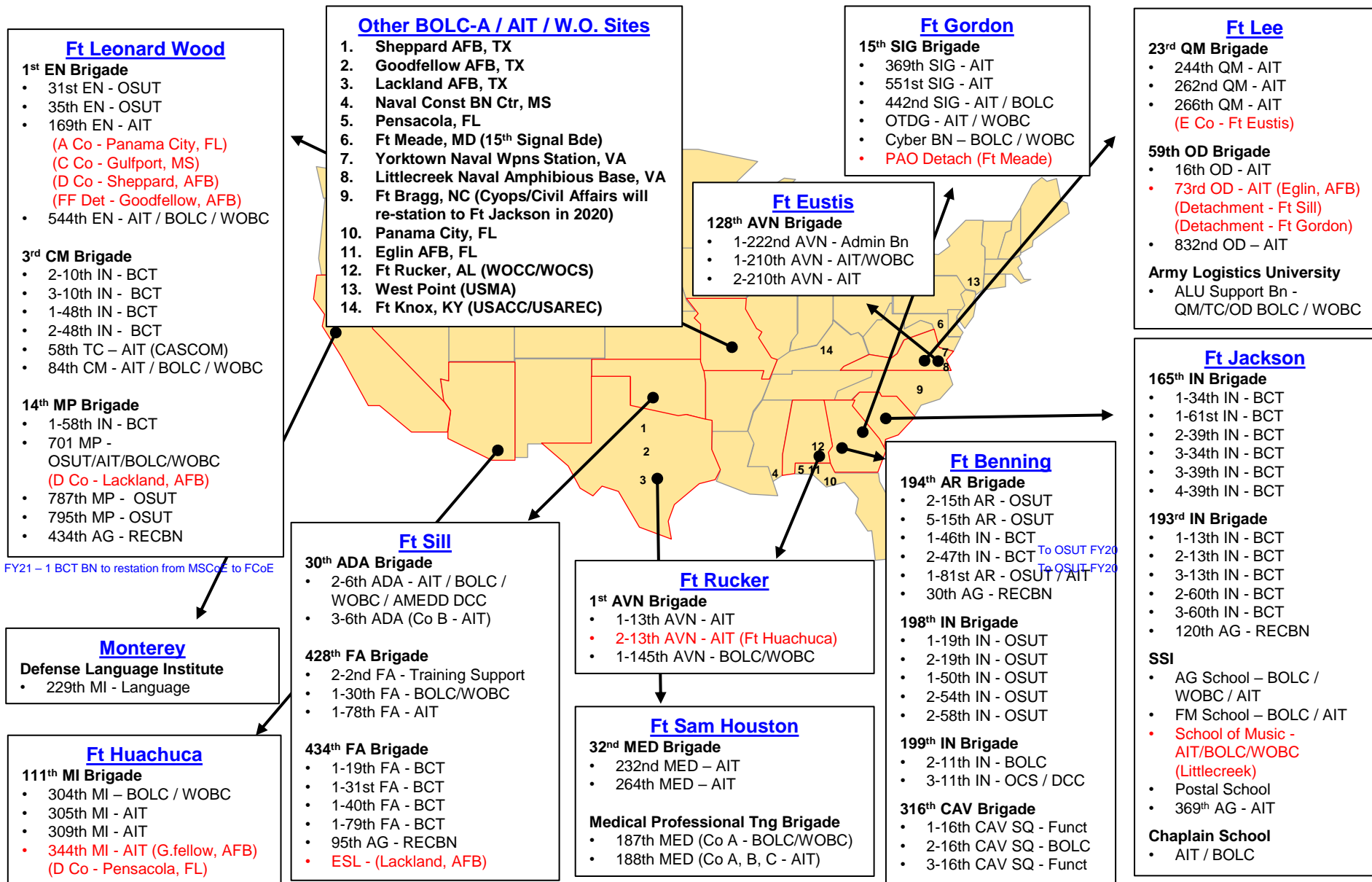
UNCLASSIFIED





- **US Army Physical Fitness School**
 - Master Fitness Trainer Course
 - FM 7-22, Army Physical Readiness Training
- **US Army Master Resilience School**
 - Level I and Level II courses
 - Aligned with Comprehensive Soldier and Family Fitness
 - Aligned with Ready & Resilient Campaign (R2C)
- **IMT Leadership School**
 - TRADOC IET Pre Command Course
 - TRADOC Company Cdr / First Sergeant Course
 - TRADOC cadre and staff courses
- **US Army Drill Sergeant Academy**
 - Train the Trainers
- **Task Force Marshall (Camp McCrady Training Ctr)**
 - Navy Mobilization Basic skills refresher
- **US Army Student Detachment**
 - C2 over 2600 students in Education worldwide





Ft Leonard Wood

1st EN Brigade

- 31st EN - OSUT
- 35th EN - OSUT
- 169th EN - AIT
- (A Co - Panama City, FL)
- (C Co - Gulfport, MS)
- (D Co - Sheppard, AFB)
- (FF Det - Goodfellow, AFB)
- 544th EN - AIT / BOLC / WOBC

3rd CM Brigade

- 2-10th IN - BCT
- 3-10th IN - BCT
- 1-48th IN - BCT
- 2-48th IN - BCT
- 58th TC - AIT (CASCOM)
- 84th CM - AIT / BOLC / WOBC

14th MP Brigade

- 1-58th IN - BCT
- 701 MP - OSUT/AIT/BOLC/WOBC
- (D Co - Lackland, AFB)
- 787th MP - OSUT
- 795th MP - OSUT
- 434th AG - RECBN

FY21 - 1 BCT BN to restation from MSCoE to FCoE

Monterey

Defense Language Institute

- 229th MI - Language

Ft Huachuca

111th MI Brigade

- 304th MI - BOLC / WOBC
- 305th MI - AIT
- 309th MI - AIT
- 344th MI - AIT (G.fellow, AFB)
- (D Co - Pensacola, FL)

Other BOLC-A / AIT / W.O. Sites

1. Sheppard AFB, TX
2. Goodfellow AFB, TX
3. Lackland AFB, TX
4. Naval Const BN Ctr, MS
5. Pensacola, FL
6. Ft Meade, MD (15th Signal Bde)
7. Yorktown Naval Wpns Station, VA
8. Littlecreek Naval Amphibious Base, VA
9. Ft Bragg, NC (Cyops/Civil Affairs will re-station to Ft Jackson in 2020)
10. Panama City, FL
11. Eglin AFB, FL
12. Ft Rucker, AL (WOCC/WOCS)
13. West Point (USMA)
14. Ft Knox, KY (USACC/USAREC)

Ft Sill

30th ADA Brigade

- 2-6th ADA - AIT / BOLC / WOBC / AMEDD DCC
- 3-6th ADA (Co B - AIT)

428th FA Brigade

- 2-2nd FA - Training Support
- 1-30th FA - BOLC/WOBC
- 1-78th FA - AIT

434th FA Brigade

- 1-19th FA - BCT
- 1-31st FA - BCT
- 1-40th FA - BCT
- 1-79th FA - BCT
- 95th AG - RECBN
- ESL - (Lackland, AFB)

Ft Rucker

1st AVN Brigade

- 1-13th AVN - AIT
- 2-13th AVN - AIT (Ft Huachuca)
- 1-145th AVN - BOLC/WOBC

Ft Sam Houston

32nd MED Brigade

- 232nd MED - AIT
- 264th MED - AIT

Medical Professional Tng Brigade

- 187th MED (Co A - BOLC/WOBC)
- 188th MED (Co A, B, C - AIT)

Ft Eustis

128th AVN Brigade

- 1-222nd AVN - Admin Bn
- 1-210th AVN - AIT/WOBC
- 2-210th AVN - AIT

Ft Gordon

15th SIG Brigade

- 369th SIG - AIT
- 551st SIG - AIT
- 442nd SIG - AIT / BOLC
- OTDG - AIT / WOBC
- Cyber BN - BOLC / WOBC
- PAO Detach (Ft Meade)

Ft Benning

194th AR Brigade

- 2-15th AR - OSUT
- 5-15th AR - OSUT
- 1-46th IN - BCT
- 2-47th IN - BCT To OSUT FY20
- 1-81st AR - OSUT / AIT To OSUT FY20
- 30th AG - RECBN

198th IN Brigade

- 1-19th IN - OSUT
- 2-19th IN - OSUT
- 1-50th IN - OSUT
- 2-54th IN - OSUT
- 2-58th IN - OSUT

199th IN Brigade

- 2-11th IN - BOLC
- 3-11th IN - OCS / DCC

316th CAV Brigade

- 1-16th CAV SQ - Funct
- 2-16th CAV SQ - BOLC
- 3-16th CAV SQ - Funct

Ft Lee

23rd QM Brigade

- 244th QM - AIT
- 262nd QM - AIT
- 266th QM - AIT
- (E Co - Ft Eustis)

59th OD Brigade

- 16th OD - AIT
- 73rd OD - AIT (Eglin, AFB)
- (Detachment - Ft Sill)
- (Detachment - Ft Gordon)
- 832nd OD - AIT

Army Logistics University

- ALU Support Bn - QM/TC/OD BOLC / WOBC

Ft Jackson

165th IN Brigade

- 1-34th IN - BCT
- 1-61st IN - BCT
- 2-39th IN - BCT
- 3-34th IN - BCT
- 3-39th IN - BCT
- 4-39th IN - BCT

193rd IN Brigade

- 1-13th IN - BCT
- 2-13th IN - BCT
- 3-13th IN - BCT
- 2-60th IN - BCT
- 3-60th IN - BCT
- 120th AG - RECBN

SSI

- AG School - BOLC / WOBC / AIT
- FM School - BOLC / AIT
- School of Music - AIT/BOLC/WOBC (Littlecreek)
- Postal School
- 369th AG - AIT

Chaplain School

- AIT / BOLC



- 1 in 20 Soldiers fail APFT
- 56,000 Soldiers non-deployable
 - 4% medically non-available
 - 5% limited duty profile
- 52% of all Soldiers will experience injury this year
- 17% of AC Soldiers are obese
 - 48% more likely to experience injury
 - 86% increased chance of being medically non-available
- MSKI affects 55% of Soldiers annually
 - Equates to 10M limited duty days
 - A 1% reduction of non-available rate saves \$30 million
- 31% of Soldiers who fail OPAT become injured
- 70% of people between the age of 17-24 unqualified for military service
 - 31% due to obesity



“The capacity and capability of the Soldier on today’s battlefield is threatened by poor health and lack of physical readiness” GEN Milley, 39th CSA



17% of Active Duty Soldiers are **clinically obese**

5% of Active Duty Soldiers fail the **APFT**

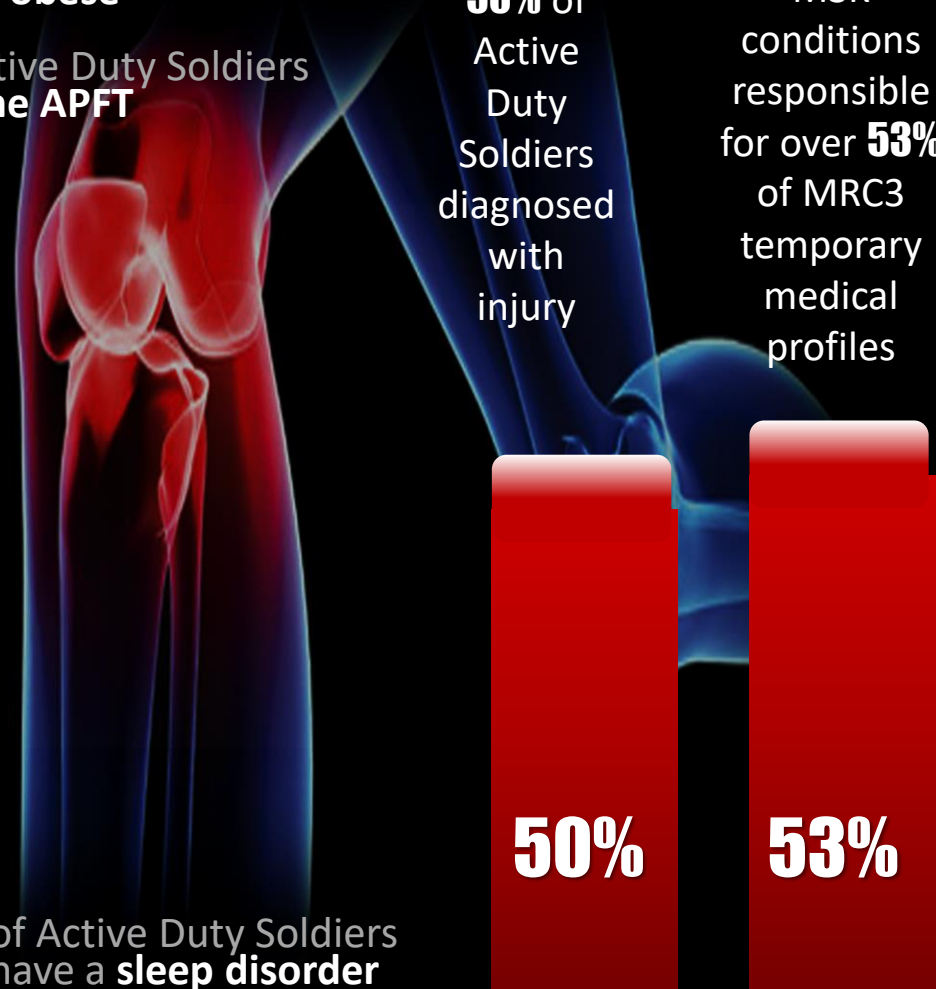
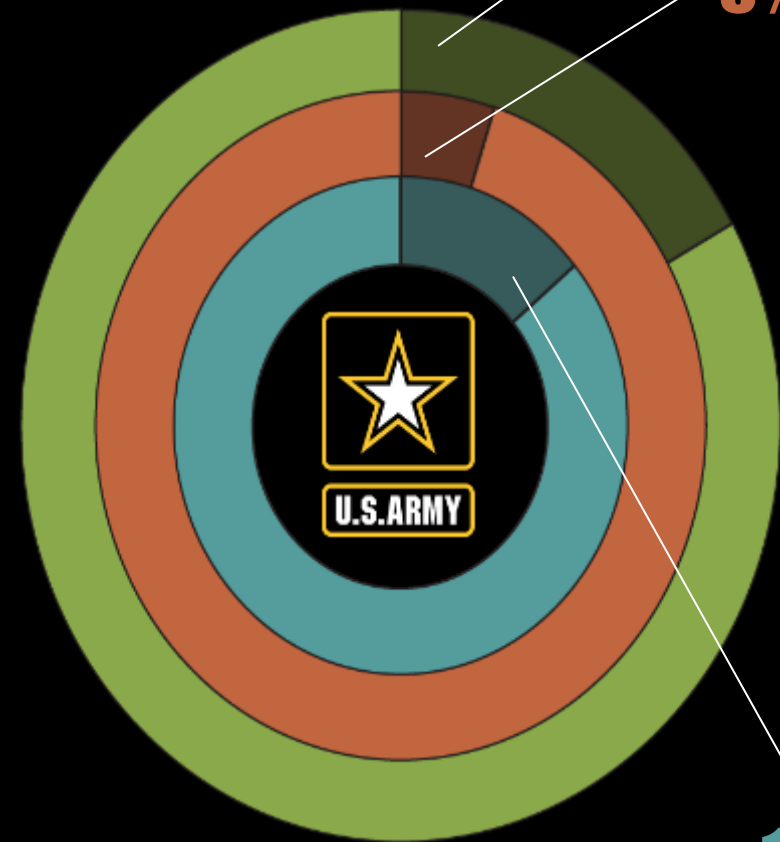
50% of Active Duty Soldiers diagnosed with injury

MSK conditions responsible for over **53%** of MRC3 temporary medical profiles

14% of Active Duty Soldiers have a **sleep disorder**

50%

53%





Percent
91--100
81--90
71--80
61--70
51--60
41--50
31--40

Gender, Age Group, Rank, and COMPO Impact on Soldier's ability to be Eligible for all Three Primary APFT Events

Age Group	MALE			FEMALE			ALL GENDER		
	USAR	ARNG	AC	USAR	ARNG	AC	USAR	ARNG	AC
<20	99.6%	99.4%	96.3%	98.1%	97.8%	86.8%	99.1%	99.0%	94.6%
20-25	97.2%	97.7%	90.8%	93.4%	91.9%	75.3%	96.4%	96.5%	88.5%
25-30	95.6%	94.2%	87.2%	89.4%	86.5%	72.2%	94.4%	92.9%	84.9%
30-35	90.5%	87.7%	82.1%	82.1%	78.3%	66.9%	88.6%	86.3%	79.8%
35-40	82.9%	80.1%	72.3%	73.1%	70.7%	58.6%	80.8%	78.8%	70.3%
40-45	75.6%	72.2%	65.6%	66.2%	63.5%	51.1%	73.7%	71.1%	63.6%
>45	66.0%	59.7%	60.1%	52.8%	50.3%	44.3%	63.4%	58.7%	57.9%
Total	89.1%	87.6%	83.7%	82.5%	84.3%	69.7%	87.7%	87.0%	81.6%
OFFICER	86.4%	88.2%	87.4%	80.0%	83.3%	77.1%	84.8%	87.4%	85.4%
ENLISTED	89.8%	87.8%	83.4%	83.2%	84.6%	68.0%	88.4%	87.2%	81.2%
WARRANT	79.8%	78.1%	73.6%	73.2%	72.8%	61.5%	78.8%	77.5%	72.4%

POC: Dr. Michael J. Carino, OTSG PA&E
 Source: MODS Mainframe, 28 February 2019

There is considerable evidence that our Soldier lacks the physical conditioning and stamina we will require for the modern battlefield. We must do something about this now!

Infantry Magazine - 1958

Why Change? Testimony from the Field

It was April 2004, the second month I was in Iraq, when I realized the physical training we had been working so hard at was truly failing us at the worst possible moment.

We were clearing houses, came under fire and had to maneuver down 75 meters in a ditch through moderate vegetation, only to come to a 5.5' wall, under full combat load.

I had never been so exhausted in my entire life, and I will never forget the feeling of collapsing at that wall, my lungs screaming for air, staring at a wall I could peer over but I couldn't get over.

Keep in mind I could roll out of bed and score a 290-310 on the APFT any day of the week.

**Zach Bowen
CPT, MI, US Army Reserve
Commander, 295th Ordnance Company**





An enterprise-wide “system” that combines all aspects of physical and non-physical human performance under a single governance to enable commanders to improve Soldier health and fitness for combat.



- Supports Soldiers with:
 - Expert personnel (PT, OT, Dietician, Athletic Trainer, Strength and Conditioning Specialist, Cognitive Performance Specialist)
 - Medical care
 - Equipment and facilities
 - Governance
- Trains Soldiers with individualized and periodized training plans
- Provides comprehensive, integrative, and immersive holistic approach to Soldier readiness
- Based upon comprehensive and evaluated scientific research

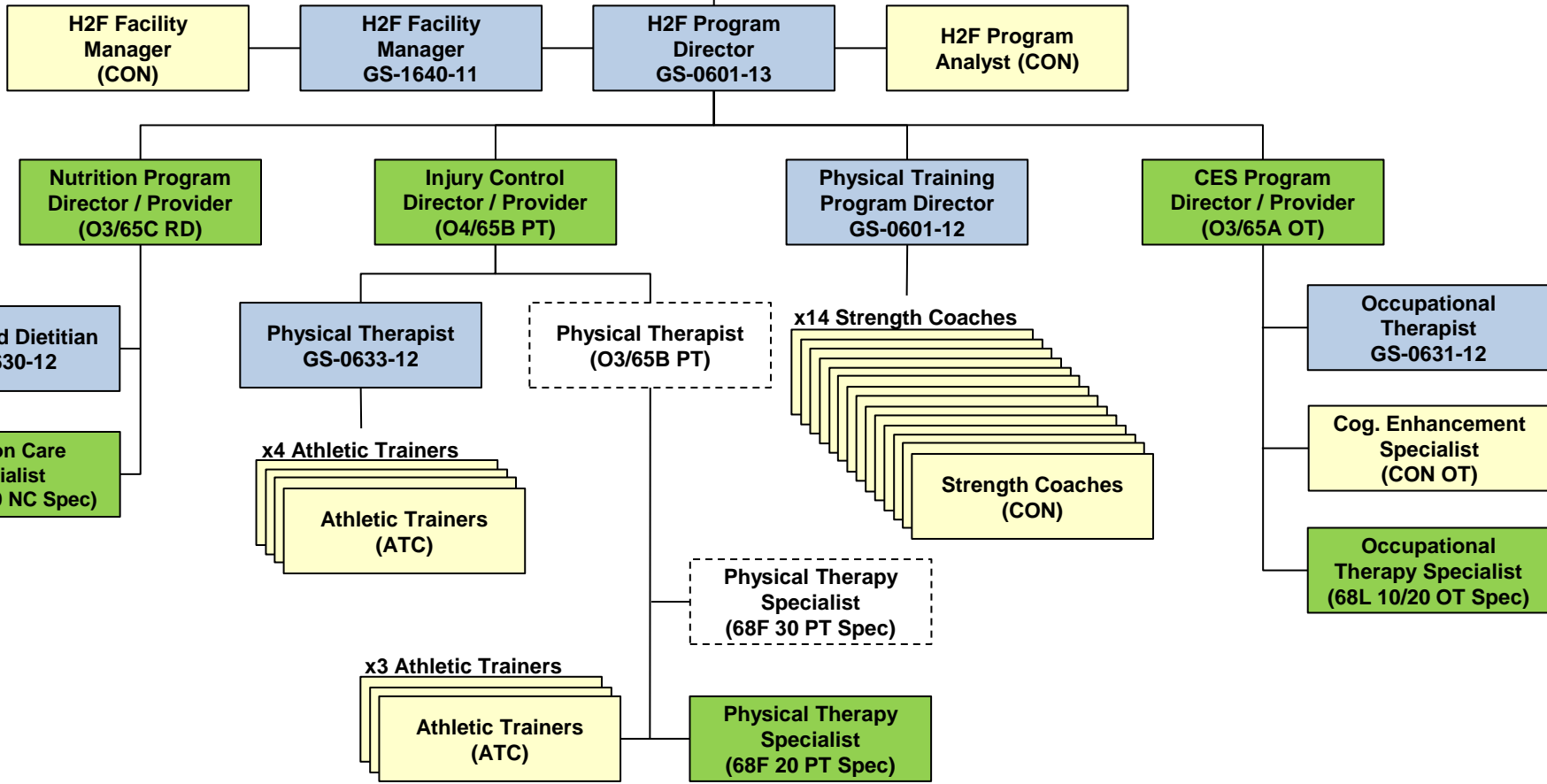




- = DAC, Deployable under AUG TDA (6)
- = Military, Deployable Capability (6)
- = Contractor based Capability (24)
- = Already assigned to BSB in a BCT (2)

∅

H2F





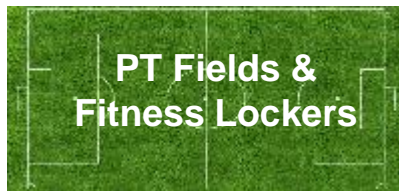
ACFT Test Site



Terrain Run Park



Obstacle Course



Example Soldier Performance Readiness Center (SPRC)



Soldier Performance Readiness Center (SPRC)



- Zone 0** - Prep / Warm-up Area
- Zone 1** - Resistance Training
- Zone 2** - Accessory Training
- Zone 3** - Work Capacity / Agility Training
- Rehabilitation / Recondition Area
- Admin / Classroom / Team room

Facility Design Standards

- x3 Facility Sizes
 - BN (~21,000 SF)
 - BDE (~42-43,000 SF)
- x3 Distinct Training Zones
 - Resistance Training
 - Accessory Training
 - Work Capacity / Agility Training
- x2 Classrooms (25 PAX each)
- X1 Rehabilitation/Reconditioning Area
- x1 Cognitive Training Area

1 FIRST FLOOR PLAN

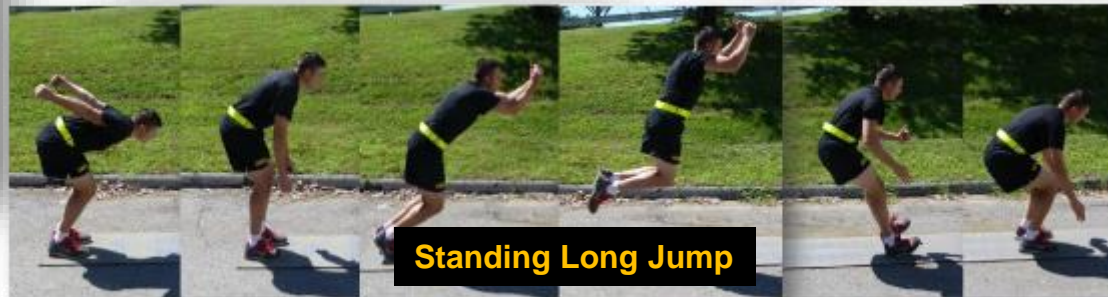
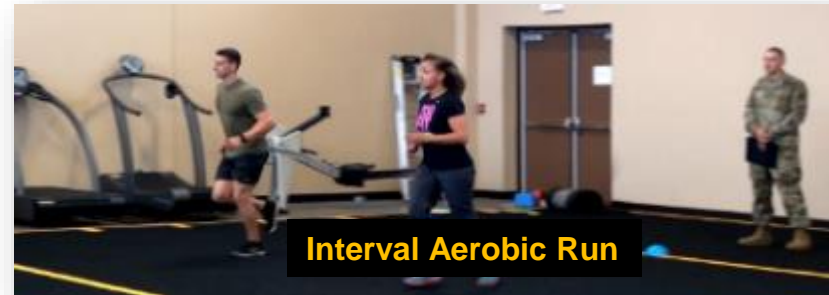
Holistic Health and Fitness (H2F)



Occupational Physical Assessment Test (OPAT)

The Occupational Physical Assessment Test (OPAT) is a four (4) event test, given at the point of accession (i.e. recruiting centers, ROTC detachments, U.S. Military Academy, and Officer Candidate School) to determine if the recruit meets the MOS pre-training standard for fitness.

Given prior to initial military training, the applicants may re-test as many times as needed but must meet standard 90 days before shipping to training.
Fitness to Train, not Fitness to Serve



**Required for
all accessions
as of
3 JAN 17**



Pre-training level of fitness

Heavy Physical Demand

Frequently / Constantly lift 41 lbs and above or any Frequent , Constant tasks 100 lbs or more with Occasional tasks over 100 lbs.

Significant Physical Demand

Frequently / Constantly lifts 41lbs-99lbs; with or without Occasional tasks up to 100 lbs

Moderate Physical Demand

Frequently / Constantly lifts up to 40 lbs or when all physical demands are occasional

BLACK - High Physical Demand		
Standing Long Jump	160cm	5'3"
Seated Power Throw	450cm	14'9"
Strength Deadlift	160lbs	
Interval Aerobic Run	43 shuttles (6-2)	

GRAY – Significant Physical Demand		
Standing Long Jump	140cm	4'7"
Seated Power Throw	400cm	13'1"
Strength Deadlift	140lbs	
Interval Aerobic Run	40 shuttles (5-8)	

GOLD – Moderate Physical Demand		
Standing Long Jump	120cm	3'11"
Seated Power Throw	350cm	11'6"
Strength Deadlift	120lbs	
Interval Aerobic Run	36 shuttles (5-4)	

Military Occupational Specialties

Infantry, Armor, Motor Transport Operator, Cavalry Scout, Armor Crew Member, and others

Rocket System Crew Member, Military Police, Combat Medic, Watercraft Engineer, Petroleum Supply Specialist, Wire Systems Installer, and others

Plumber, Dental Specialist, Pharmacy Specialist, Ammunition Specialist, Tracked Vehicle Repairer, Logistical Specialist, Air Traffic Control Repair Specialist, Fire Control Repairer, and others

Currently Unprepared to meet Physical Demands / Unprepared to Ship to Training - WHITE

Holistic Health and Fitness (H2F)



Army Combat Fitness Test (ACFT)



ACFT

Purpose: Assess a Soldier's physical performance capability within components of combat fitness

Objectives

1. Improve individual Soldier readiness
2. Transform the culture of Army fitness
3. Reduce preventable injuries and attrition
4. Enhance mental toughness and stamina
5. Contribute to increased unit readiness

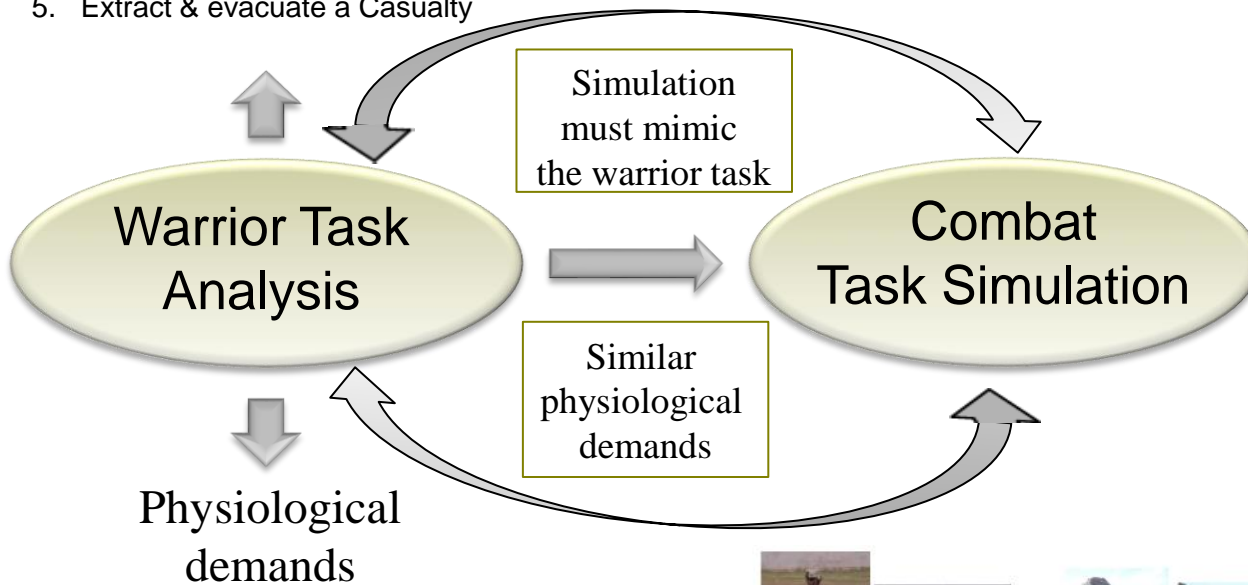


ACFT scoring is both gender and age neutral



Identify HPDT tasks:

1. Movement to Contact
2. Build Fighting Position
3. Move O/U/A/T in Urban Terrain
4. React to man-on-man contact
5. Extract & evacuate a Casualty



Predictive Tests:

must successfully predict task simulation performance

- Muscular Strength
- Muscular Endurance
- Explosive Power
- Speed / Agility
- Aerobic Endurance





★ Move Over, Under, Around, and Through Obstacles





Task: Move Over, Through, and Around Obstacles

Condition: Wearing 80 lb Fighting Load, if necessary, equipment may be removed, but must be worn/carried after obstacle is cleared

Standard: Obstacles successfully negotiated, without assistance

Scenario

Soldier with an 80-pound Fighting Load executes 9 skills: (1) sprints 10m, (2) low crawls 10m, (3) zig-zag run 30 m jumping over 2 low obstacles and negotiating 8 tires, (4) traverses platform with load, (6) high crawl negotiates 3-high, 2-low obstacles in 3 minutes.

★ Prepare a Fighting Position



Task: Prepare a Fighting Position

Condition: Wearing/carrying 80 lb Fighting Load, ground-level on sand or soil

Standard: Dig/fill 2-4gal containers with sand and transfer 5m to 2-5gal containers until they are full. Lift/carry/back 16 sandbags

Scenario

Soldier with 80-pound Fighting Load prepares temporary fighting position. Soldier uses a shovel and digs from the bent or stooped position, to fill two 2-gal containers weighing 40 lbs when full. Soldier transfers sand to a 5-gal container until they are full. Soldier then lifts/carries 16 10lb sand bags and a 30" platform to build a 4x4 sandbag wall. Time to completion is 15 minutes.

★ Conduct Tactical Foot March

Task: Conduct a 16 km tactical foot march

Condition: Wearing/carrying 128-pound Approach March load

Standard: Complete in 4 hours

Scenario

Soldier conducts a 16 km tactical foot march in 4 hours while carrying a 128 pound load. That equates to 10 miles in 4 hours, or a 2.5 miles-per-hour pace, under a 128 pound load.





★ Man-to-Man Contact

Task: Perform Combatives

Condition: Wearing/carrying 80-lb load, unobstructed push-course

Standard: Execute three basic physical tasks that simulate the strength and power required to perform combatives

Scenario

Soldier executes the four physical tasks that simulate the strength/power required to perform combatives: (1) close to contact, (2) take your opponent to the ground, (3) disable/kill your opponent.




★ Casualty Extraction – Drag to





Task: Drag a Casualty

Condition: Wearing/carrying 80 lb Fighting Load, non-resp

Standard: Extricate and drag casualty (80 lb Fighting Load) non-resp

Scenario

Wearing an 80-pound Fighting Load, soldier sprints 15m. Soldier extricates a 220lb casualty bolted into the drivers seat of a disabled HUMVEE with a 220lb casualty bolted into the drivers seat. Soldier removes the casualty from the HUMVEE, executing a controlled lowering to the ground and grabs pull strap on casualty's pack, rises to crouched position, and uses two hands to drag the casualty 30 meters to safety. Time to completion is 2 minutes.

★ Man-to-Man Contact

Task: Perform Combatives

Condition: Wearing/carrying 80-lb load, unobstructed push-course

Standard: Execute three basic physical tasks that simulate the strength and power required to perform combatives

Scenario

Soldier executes the four physical tasks that simulate the strength/power required to perform combatives: (1) close to contact, (2) take your opponent to the ground, (3) disable/kill your opponent.







1- Movement to contact



2- Build a hasty fighting position

3- Move over-under-around-through obstacles on uneven terrain



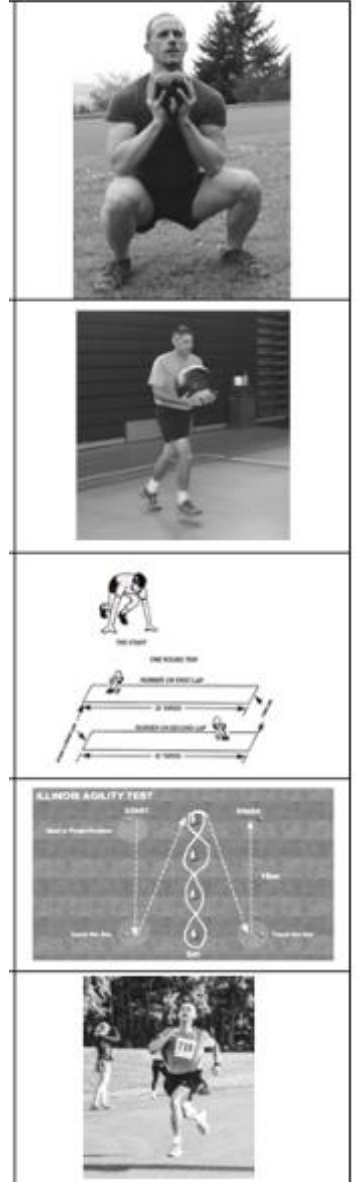
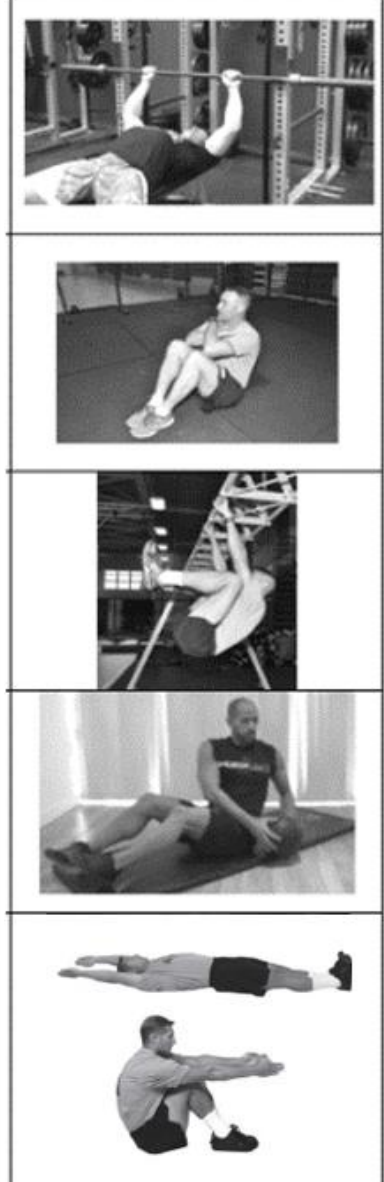
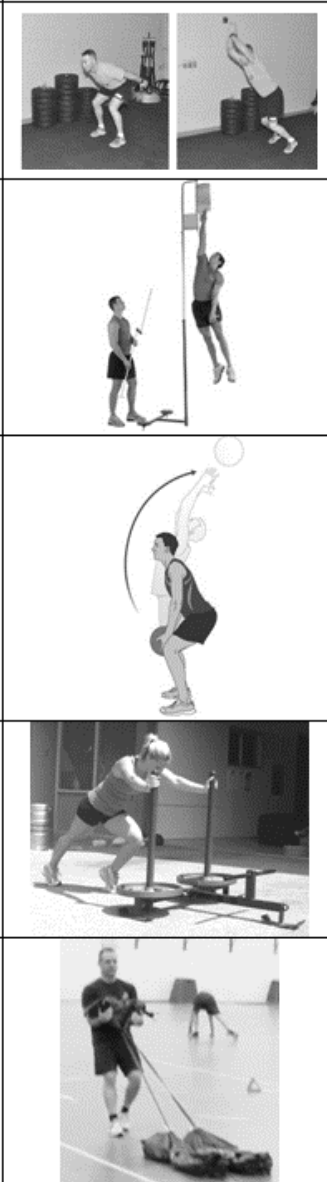


4. Employ progressive levels of strength / power (man-man contact)



5. Extract – Evacuate a casualty





+ APFT Scores from unit DD 705



Muscular Strength

Lift, carry, drag heavy loads



Move quickly over, under, around, through obstacles

Speed - Agility



Muscular Endurance

Work for long periods of time



Move for long distances over uneven terrain under load

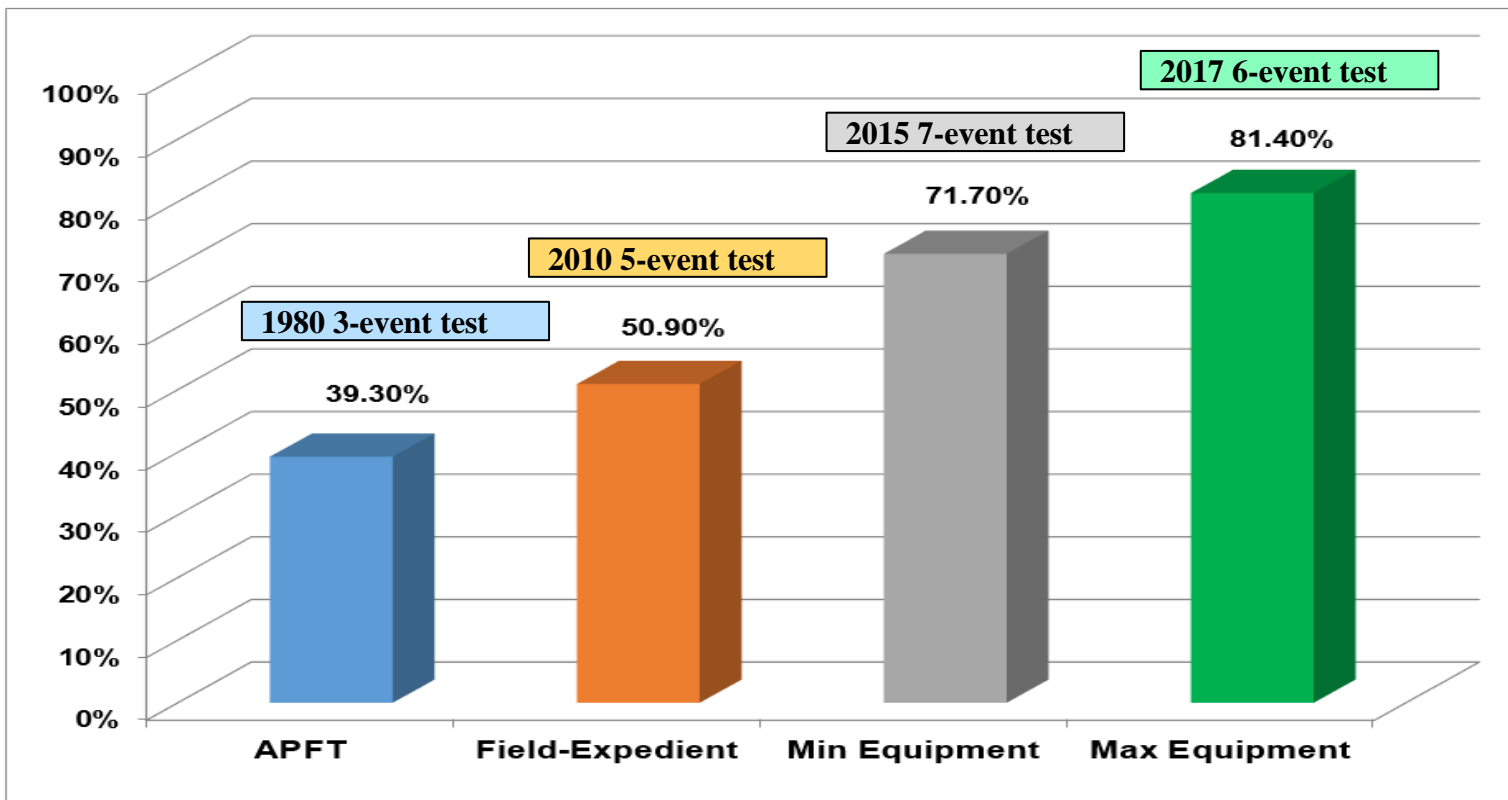
Aerobic Endurance



Explosive Power

Generate and apply force





Push-up
2-mile Run
Sit-up

Push-up
2-mile Run
Rower
300m Shuttle
Standing LJ
Pull-up

Push-up
2-mile Run
300m Shuttle
Deadlift
Power Throw
Leg Tuck
Power Drag

T Push-up
2-mile Run
Sprint-drag-carry
Deadlift
Power Throw
Leg Tuck



#1 3RM Deadlift



#2 Standing Power Throw

#3 Hand Release Push-Up



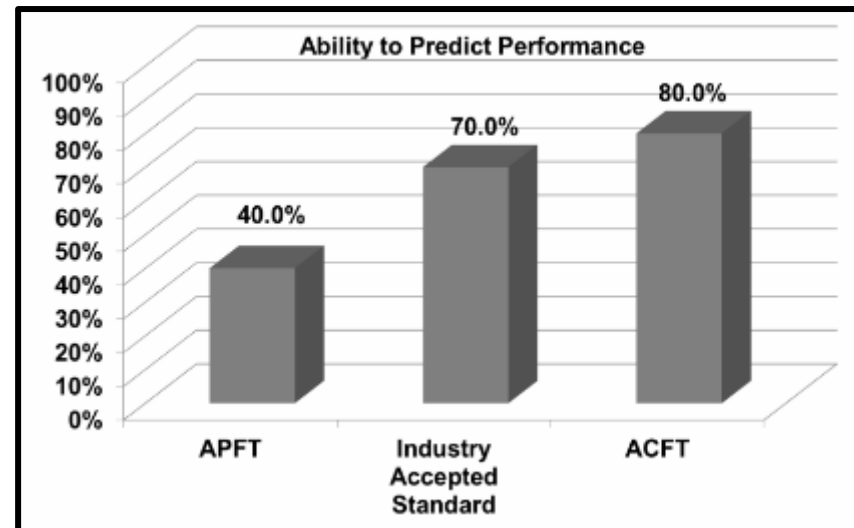
#4 Sprint, Drag, Carry



#5 Leg Tuck

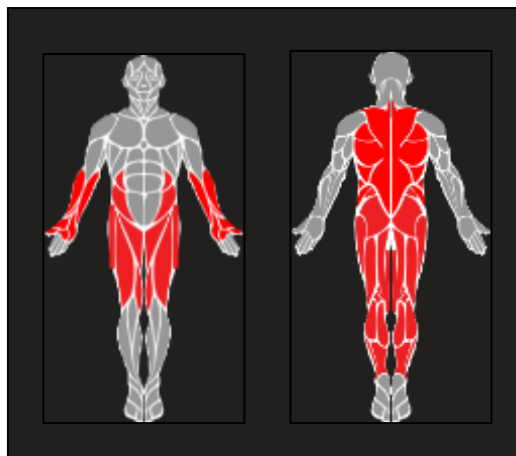


#6 2.0-Mile Run



ACFT Admin Considerations

1. Even number lanes
2. CO-sized element – 16 lanes
3. OIC / NCOIC selection
4. 1-grader per lane
5. Transition to the SPT

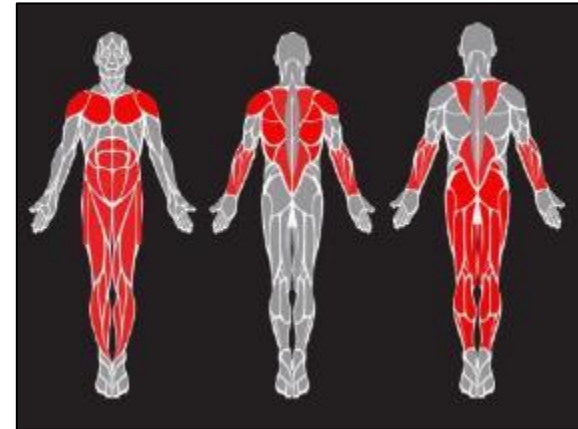


- **Task:** Execute the 3 repetition maximum (RM) deadlift event to assess lower-body strength
- **Condition:** Given a hexbar, weight plates, and barbell collars totaling up to 460lbs in an outdoor or indoor testing environment
- **Standard:** Within five (5) minutes, conduct three (3) repetitions of the MDL maintaining proper lifting form throughout the movement IAW FM 7-22, App A to meet the ACFT scoring standards
- **Component of Fitness: Muscular Strength**
 - Definition: the maximum amount of force that can be generated by a muscle or muscle group
 - Secondary Component of Fitness: flexibility
 - Anatomical Focus: knee extension, hip extension, grip, lower back
- **Application to Common Soldier Tasks (CST)**
 - Lifting heavy loads off the ground; casualty extraction/evacuation; carrying/transporting heavy loads (155mm artillery rounds, ammo boxes, etc.)

• Relevant Principles for Event Selection

1. Efficacy: Highly predictive test to assess for lower body / core muscular strength
2. Safety: Hexbar (vs Olympic bar) provides better anatomical position for proper lifting – controls for injury
3. Ease of Administration: Requires one (1) grader per lane; event time ~5:00 min per Soldier
4. Grading: Simple to grade, replicate over time/space



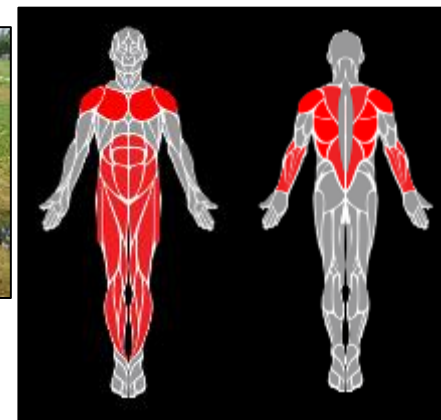


- **Task:** Execute the SPT event to assess upper and lower body explosive power
- **Condition:** Given a 10lb medicine ball and tape measure in an outdoor or indoor testing environment
- **Standard:** Within three (3) minutes, conduct one (1) practice and two (2) record SPTs using proper movement technique IAW FM 7-22, App A to meet the ACFT scoring standards
- **Component of Fitness: Explosive Power**
 - Definition: generating maximal force in the shortest time
 - Secondary Component of Fitness: balance, coordination, flexibility
 - Anatomical Focus: knee extension, hip extension, grip, lower back
- **Application to Common Soldier Tasks (CST)**
 - Mounting obstacles or vehicles; lifting Soldiers up/onto/over obstacles or vehicles; lifting loads off the ground and up/onto a vehicle or platform; jumping, leaping, climbing over obstacles; throwing a grenade

• Relevant Principles for Event Selection

1. Efficacy: Highly predictive test assessing upper and lower body power required for Common Soldier Tasks (CSTs); strong driver for upper and lower body power training
2. Safety: A “preparatory drill” and 50% effort practice throw prior to event mitigates risk of injury
3. Ease of Administration: Requires one (1) grader and one (1) marker per lane; event time ~3:00 min per Soldier
4. Grading: Simple to grade, replicate over time/space



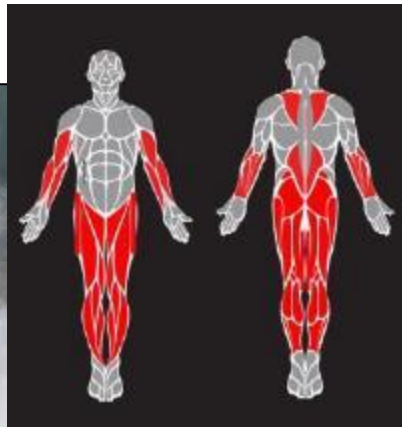


- **Task:** Execute the timed HRP (Arm Extension) event to assess muscular endurance
- **Condition:** Given a stopwatch in an outdoor or indoor testing environment
- **Standard:** Conduct as many repetitions as possible in two (2) minutes utilizing proper movement technique IAW FM 7-22, App A to meet the ACFT scoring standards
- **Component of Fitness: Muscular Endurance**
 - Definition: the ability of a muscle or muscle group to repetitively perform work for an extended period of time to volitional fatigue
 - Secondary Component of Fitness: flexibility
 - Anatomical Focus: elbow extension, shoulder flexion and extension
- **Application to Common Soldier Tasks (CST)**
 - Pushing loads up/onto/over obstacles; employing progressive levels of force; load carriage; dynamic balance under load

• Relevant Principles for Event Selection

1. Efficacy: Better predictive test assessing upper body endurance than the current APFT push-up; strong driver for upper body/core strength training
2. Safety: Minimal risk for injury with proper training program
3. Ease of Administration: Requires one (1) grader per lane; event time = 2:00 min per Soldier
4. Grading: Simple to grade, replicate over time/space



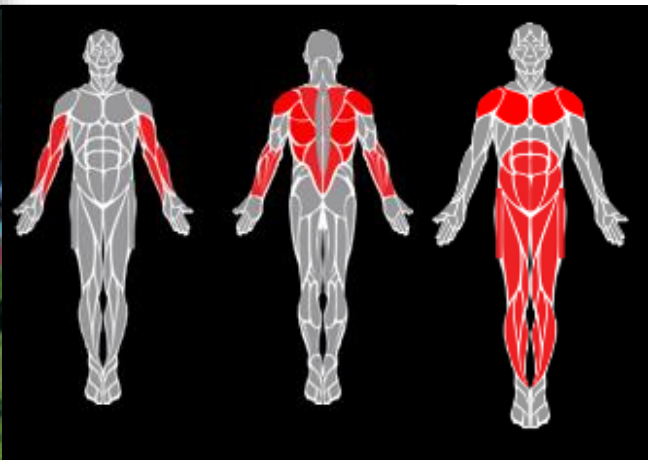


Relevant Principles for Event Selection

1. **Efficacy:** Highly predictive test assessing anaerobic power and endurance; strong driver for high intensity anaerobic training
2. **Safety:** Minimal risk for injury with proper training program; lateral shuttle in lap three (3) reduces the fall risk linked with lower leg muscle fatigue
3. **Ease of Administration:** Requires one (1) grader and one (1) lane safety per two (2) lanes; event time ~4:00 min per Soldier
4. **Grading:** Simple to grade, replicate over time/space

- **Task:** Execute the timed SDC event to assess muscular strength and endurance, and anaerobic power and endurance
- **Condition:** Given a 25m lane, one (1) drag sled, two (2) 45lb weight plates, two (2) 40lb kettlebells, and a stopwatch in an outdoor or indoor testing environment
- **Standard:** Within four (4) minutes, conduct five (5) x 50m shuttles for time in the following order – 50m sprint, 50m sled drag, 50m lateral shuttle, 50m kettlebell carry, 50m sprint IAW FM 7-22, App A
- **Component of Fitness: Muscular Endurance and Strength, Anaerobic Power, Anaerobic Endurance**
 - **Definition:** sustained moderate to high intensity muscular work over short duration
 - **Secondary Component of Fitness:** reaction time, coordination, agility, balance, flexibility
 - **Anatomical Focus:** knee extension, hip extension, grip, lower back, shoulders
- **Application to Common Soldier Tasks (CST)**
 - Moving quickly over uneven terrain under load; moving over/around/through obstacles; casualty extraction/evacuation; moving supplies or ammunition; 3-5 second rushes



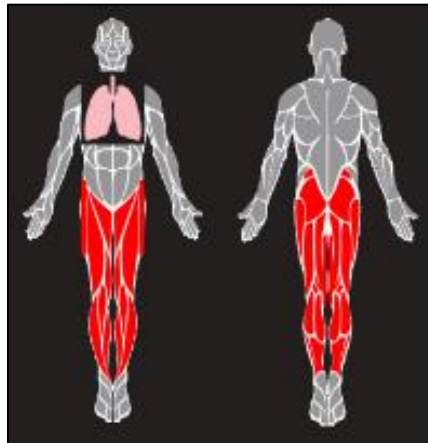


Relevant Principles for Event Selection

1. **Efficacy:** Highly predictive test assessing upper body/grip/core strength and endurance; greater functionality compared to alternative events; improves dynamic balance and mobility; contributes significantly to the prevention of over-use load carriage injuries
2. **Safety:** Minimal risk for injury since the Soldiers feet/legs remain under the base of support
3. **Ease of Administration:** Requires one (1) grader per lane; event time ~2:00 min per Soldier
4. **Grading:** Simple to grade, replicate over time/space

- **Task:** Execute the LTK event to assess muscular endurance
- **Condition:** Given a 7.5ft high x 5ft wide pull-up bar or climbing pod in an outdoor or indoor testing environment
- **Standard:** Within two (2) minute, conduct as many LTKs as possible utilizing proper movement technique IAW FM 7-22, App A to meet the ACFT scoring standards
- **Component of Fitness: Muscular Endurance**
 - **Definition:** the ability of a muscle or muscle group to repetitively perform work for an extended period of time to volitional fatigue
 - **Secondary Component of Fitness:** flexibility
 - **Anatomical Focus:** knee flexion, hip flexion, grip, abdominals
- **Application to Common Soldier Tasks (CST)**
 - Climbing up/onto/over vehicles or obstacles; traversing rope/ladder bridges; load carriage; dynamic balance under load





- **Task:** Execute a timed 2MR to assess aerobic endurance
- **Condition:** Given a measured and generally flat, outdoor 2.0-mile course and stopwatch or outdoor race clock
- **Standard:** Execute the timed 2MR utilizing proper running skill IAW FM 7-22, App A to meet the ACFT scoring standards
- **Component of Fitness: Aerobic Endurance**
 - Definition: the ability to exercise large muscle groups at a level somewhere between moderate and high intensity for more than a few minutes
 - Secondary Component of Fitness: None
 - Anatomical Focus: knee flexion-extension, hip flexion-extension
- **Application to Common Soldier Tasks (CST)**
 - Moving long distances over uneven terrain under load; recovery from high intensity movements such as 3-5 second rushes; movement under fire

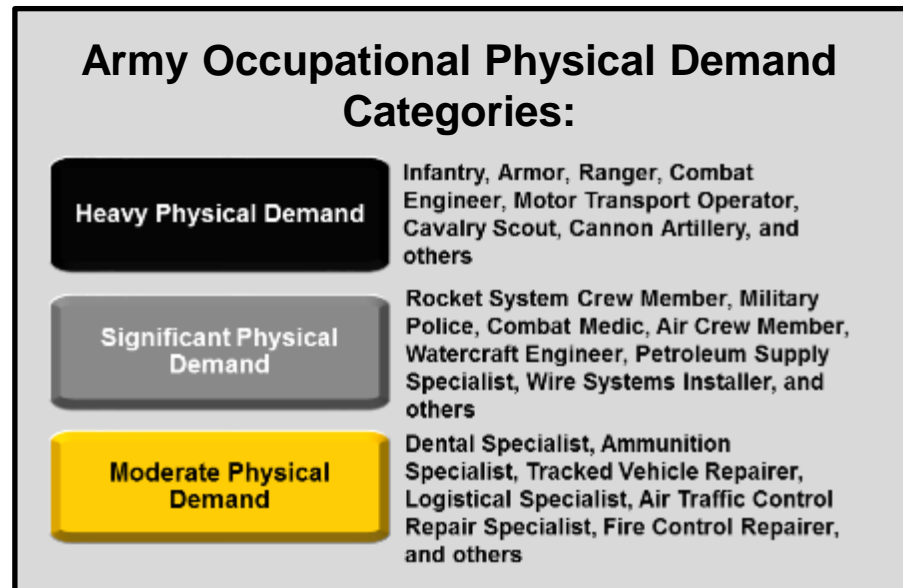
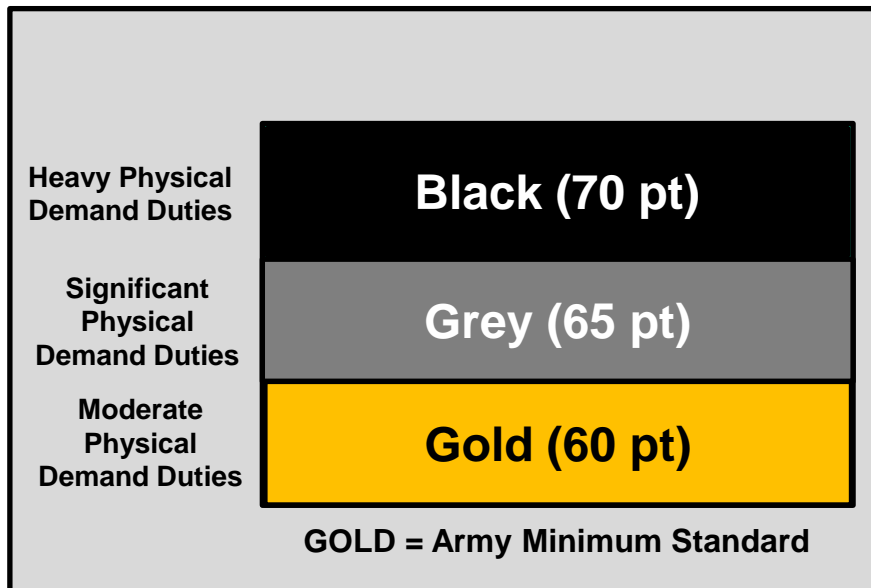
• Relevant Principles for Event Selection

1. Efficacy: Highly predictive test assessing for measuring aerobic endurance
2. Safety: Minimal risk for injury
3. Ease of Administration: Requires one (1) grader per course; separate 2MR graders are authorized; event time ≤ 21:07 min per Soldier
4. Grading: Simple to grade, replicate over time/space



Scoring Category Principles

1. Based on requirements by unit and/or individual occupational physical demands
2. Maintains occupational fitness requirements for close combat battalion and below units regardless of age or gender (Black & Grey categories)



National Defense Authorization Act (NDAA) – 2015


GENDER-NEUTRAL OCCUPATIONAL PERFORMANCE STANDARDS: "...the Secretary of Defense – (1) shall ensure that qualification of members of the Armed Forces for, and continuance of members of the Armed Forces in, that occupational career field is evaluated on the basis of common, relevant performance standards, without differential standards or evaluation on the basis of gender."




Web Link: www.army.mil/ACFT

OVERVIEW


The Army Combat Fitness Test will better connect fitness with combat readiness for all Soldiers.




**IMPROVE SOLDIER AND UNIT
 READINESS**




**TRANSFORM THE ARMY'S
 FITNESS CULTURE**



**REDUCE PREVENTABLE
 INJURIES AND ATTRITION**



**ENHANCE MENTAL
 TOUGHNESS AND STAMINA**



EVENT 1
 3 REPETITION MAXIMUM DEADLIFT (MDL)


5 MINUTES
 Goal: 100% correct weight, correct form.

The 3 Repetition Maximum Deadlift (MDL) event measures movement readiness to safely and effectively lift heavy loads from the ground. Keep knees and feet wide, leading foot forward, back, knees, hips and ankles in a line. Feet should be under and level back to back, based on height. Top of shoes under front knee.


40194 (REV. 08-15) ACFT-11 (01)

Frequently Asked Questions | [READ MORE >>](#)


ARMY COMBAT FITNESS TEST EVENTS




**3 REPETITION MAXIMUM
 DEADLIFT (MDL)**




**STANDING POWER
 THROW (SPT)**




**HAND-RELEASE PUSH-
 UP (HRP)**



**SPRINT-DRAG-CARRY
 (SDC)**



LEG TUCK (LTK)



TWO-MILE RUN (2MR)

RESOURCES

- [Army Combat Fitness Test Training Guide](#)
- [FM 7-22 Army Physical Readiness Training](#)
- [ACFT Equipment List](#)
- [ACFT Field Testing Manual](#)
- [Center for Army Lessons Learned \(CALL\) Manual](#)
- [Six Event Highlight Poster \(OTA 07-08-005\)](#)
- [Army Physical Readiness Training application \(iOS\)](#)
- [Army Physical Readiness Training application \(Android\)](#)

Any comments or recommendations for improvement should be prepared using DA Form 2028 and sent to Director, Research and Analysis, United States Army Center for Initial Military Training, ATTN: ATMT-RA, 210 Dillon Circle, Fort Eustis, Virginia 23604-5701, or submit an electronic DA Form 2028 by email to usarmy/ble.tradoc.listg2-acft@mail.mil

Plus ça change, plus c'est la même chose

...statistics show that **one-third of our young manhood had physical defects which rejected them from the Army** in spite of the fact that the standards were not high. Most of these had but recently left school. It demonstrated that something was wrong; that the schools were not preparing the youth physically for life.

Besides physical unfitness it was discovered also in Army camps that our young people were physical illiterates. It was realized that the public schools are responsible for physical literacy as well as for mental literacy. **Men in camps could not jump eight-foot trenches nor vault four-foot fences. They lacked ability and skill to handle their bodies in emergencies as well as in games.** There was a lack of neuromuscular skill. We needed physical education to train the body to act, as well as mental education to train the mind to think.

School health examinations and statistics over the country have indicated that **more than 70 percent of the school children have defects which affect their mental as well as physical growth and development.** It is recognized that a physically fit person is more likely to be efficient, happy, and useful. A physically fit nation is better prepared to meet any emergency either from within or without.

Journal of Health, Physical Education, Recreation, Volume 9

E.D. Mitchell, Editor

American Assoc. for Health and Physical Education

(Jan 1938)



Opportunities for Health and Fitness Specialists:

- Physical Therapists
- Registered Dietitians
- Occupational Therapists
- Athletic Trainers
- Strength and Conditioning Specialists
- Cognitive Enhancement Specialists

Opportunities for Equipment and Facilities:

- Lifting, Aerobic, Non-Aerobic, Rehab
- Training equipment
- Building, facilities, sites

Opportunities for Training and Management:

- IT systems, APPs, Database
- Tracking
- Training Programs

Opportunities for Research and Development:

- Individual, male/female
- Nutrition, supplements, diet
- Physical fitness, training methodology, equipment testing



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Questions?



ACFT FOC SCALE (Final)

Points	MDL	SPT	HRP	SDC	LTK	2MR
100	340	12.5	60	1:33	20	13:30
99		12.4	59	1:36		13:39
98		12.2	58	1:39	19	13:48
97	330	12.1	57	1:41		13:57
96		11.9	56	1:43	18	14:06
95		11.8	55	1:45		14:15
94	320	11.6	54	1:46	17	14:24
93		11.5	53	1:47		14:33
92	310	11.3	52	1:48	16	14:42
91		11.2	51	1:49		14:51
90	300	11.0	50	1:50	15	15:00
89		10.9	49	1:51		15:09
88	290	10.7	48	1:52	14	15:18
87		10.6	47	1:53		15:27
86	280	10.4	46	1:54	13	15:36
85		10.3	45	1:55		15:45
84	270	10.1	44	1:56	12	15:54
83		10.0	43	1:57		16:03
82	260	9.8	42	1:58	11	16:12
81		9.7	41	1:59		16:21
80	250	9.5	40	2:00	10	16:30
79		9.4	39	2:01		16:39
78	240	9.2	38	2:02	9	16:48
77		9.1	37	2:03		16:57
76	230	8.9	36	2:04	8	17:06
75		8.8	35	2:05		17:15
74	220	8.6	34	2:06	7	17:24
73		8.5	33	2:07		17:33
72	210	8.3	32	2:08	6	17:42
71		8.2	31	2:09		17:51
70	200	8.0	30	2:10	5	18:00
69		7.8	28	2:14		18:12
68	190	7.5	26	2:18	4	18:24
67		7.1	24	2:22		18:36
66		6.8	22	2:26		18:48
65	180	6.5	20	2:30	3	19:00
64	170	6.2	18	2:35		19:24
63	160	5.8	16	2:40		19:48
62	150	5.4	14	2:45	2	20:12
61		4.9	12	2:50		20:36
60	140	4.5	10	3:00	1	21:00

Scoring For IOC (Field Test) – Modified as data develops during IOC Phase

-  Minimum score for Soldiers in heavy physical demand unit/MOS
-  Minimum score for Soldiers in significant physical demand unit/MOS
-  Minimum Score for Soldiers in moderate physical demand unit/MOS (Army minimum)



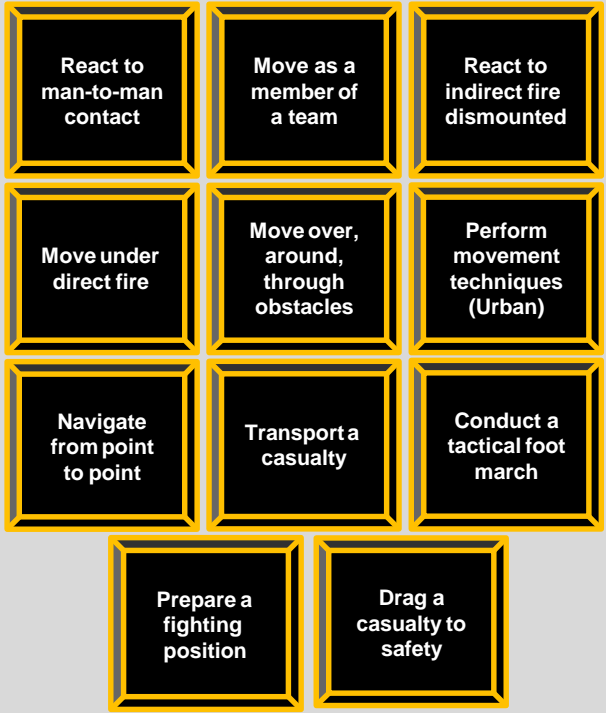
Critical Requirements for Deployment to Combat

....fight, decrease risk to self and render aid to others in a combat environment.

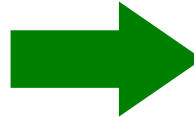
Can Do

Fully Fit For Combat

11 Physically Demanding WTBD / CSTs identified in the BSPRRS study

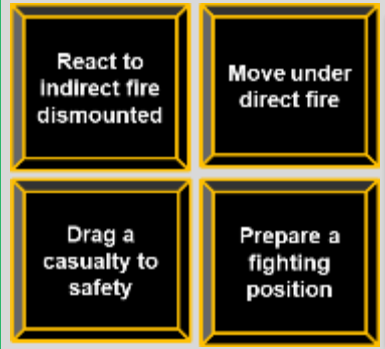


Must Do



Deployable with Risk

Critical Requirements to mitigate risk in a high threat environment

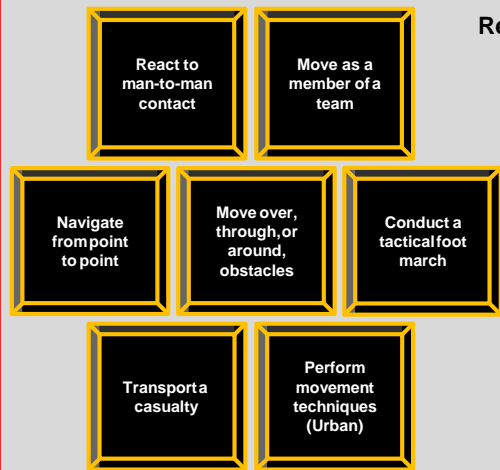


Assesses four (4) primary and three (3) secondary components of fitness

Should Do



Requirements not measured by the ACFT Alternate Assessment





Only for Deployable Soldiers on a Permanent Profile

Modified Assessment – Three (3) Event Minimum

MDL	SPT	HRP	SDC	LTK	2MR / Row / Bike / Swim

- Soldier **MUST** complete Deadlift and Sprint- Drag-Carry, plus one aerobic event (3 non- impact alternative events are authorized)
- Soldier will complete any ACFT event not prohibited by their profile
- Note: Measures the minimum physical attributes to fight, decrease risk to self and render aid to others...

- Only for Soldiers on Permanent Profile with a deployment limiting code
- (Continuation on Active Duty (COAD), Continuation of Active Reserve (COAR), or approved retention waivers)
- Health Assessment – One (1) Event
 - Soldier performs ACFT 2-mile run or one (1) of the three (3) authorized aerobic test events; measure time to complete the specified distance.



Pass	Row	Bike	Swim	Run
Distance*	5,000m	15,000m	1,000m	ACFT

*IOC scale scores to be refined during the ACFT Field Test

FM 7-22

Holistic Health and Fitness

2019

DISTRIBUTION RESTRICTION:
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DESTRUCTION NOTICE: [Delete this line if no destruction notice required.]
This publication supersedes FM 7-22 26 OCT 2012.

Headquarters, Department of the Army

FM 7-22, Holistic Health & Fitness

- Part 1: System – H2F overview and planning
- Part 2: Design – Physical, Nutrition, Spiritual, Mental and Sleep readiness
- Part 3: Build – H2F program design
- Part 4: Deliver – H2F schedules
- Part 5: Test – OPAT and ACFT

Appendices:

- PRT Drills and Exercises
- H2F Personnel
- H2F Equipment
- H2F Leader Education
- New Army Water Survival Training, Sleep and, Mental readiness
- New Army Nutrition doctrine
- New Army Pregnancy and Post-Partum Physical Training
- New Army Running Skill doctrine
- New Army Spiritual Readiness doctrine
- New Army Health Coaching instruction

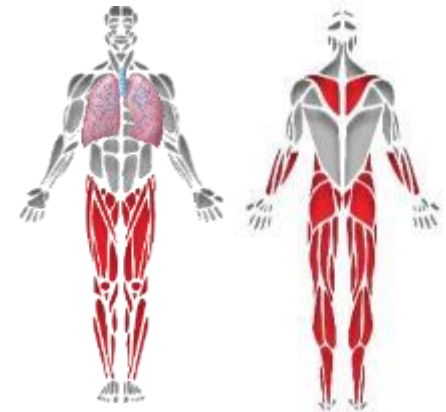
Way Ahead

- Publish H2F Concept Paper
- Publish ADP on H2F System
- Publish FM 7-22 and other documents as required

Alternate Event

5,000m Row

- **Task:** Execute a challenging alternate non-impact aerobic event for permanent profile Soldiers who cannot perform the 2-mile run
- **Condition:** Given a standardized and approved horizontal rowing machine (ergometric)
- **Standard:** Execute the rowing event utilizing proper form to meet equivalent ACFT muscular and aerobic performance standards within 25 minutes
- **Relevant Principles for Event Selection**
 1. Efficacy: Highly predictive test assessing for measuring aerobic endurance
 2. Safety: Minimal risk for injury; appropriate for Soldiers on a lower body no / low impact profile
 3. Ease of Administration: Requires one (1) grader event time $\leq 25:00$ min per Soldier *
 4. Grading: Simple to grade, replicate over time/space
* = remains TBD with Field Test scoring, age and gender neutral



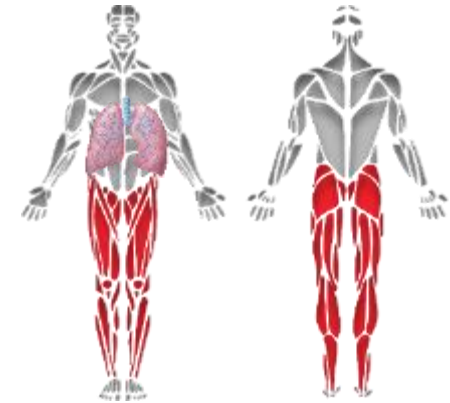
An ergometric rower works multiple large muscle groups, to include shoulders, arms, core, and legs, at one time. The repetitive push and pull under tension provides a low-impact assessment of muscular and aerobic endurance.

Alternate Event

15,000m Bike

- **Task:** Execute a challenging alternate non-impact aerobic event for permanent profile Soldiers who cannot perform the 2-mile run
- **Condition:** Given a standardized and approved stationary bike machine (ergometric)
- **Standard:** Execute the timed bike event utilizing proper form to meet equivalent ACFT muscular and aerobic performance standards within 25 minutes
- **Relevant Principles for Event Selection**
 1. Efficacy: Highly predictive test assessing for measuring aerobic endurance
 2. Safety: Minimal risk for injury; appropriate for Soldiers on an upper body profile and lower body no / low impact profile
 3. Ease of Administration: Requires one (1) grader event time $\leq 25:00$ min per Soldier *
 4. Grading: Simple to grade, replicate over time/space

*= remains TBD with Field Test scoring, age and gender neutral



An ergometric bike works large muscle groups in the legs. Repetitive movements under tension provides a low-impact assessment of lower-body muscular and aerobic endurance.

Alternate Event

1,000m Swim

- **Task:** Execute a challenging alternate non-impact aerobic event for permanent profile Soldiers who cannot perform the 2-mile run
- **Condition:** Given a standardized and approved 25-50m swimming pool
- **Standard:** Execute the timed swim event utilizing proper form to meet equivalent ACFT muscular and aerobic performance standards within 25 minutes
- **Relevant Principles for Event Selection**
 1. **Efficacy:** Highly predictive test assessing for measuring aerobic endurance
 2. **Safety:** Minimal risk for injury; appropriate for Soldiers on an upper body profile and lower body no / low impact profile
 3. **Ease of Administration:** Requires one (1) grader event time $\leq 25:00$ min per Soldier *
 4. **Grading:** Simple to grade, difficult to replicate over time/space v. pool requirements

* = remains TBD with Field Test scoring, age and gender neutral



The swim works multiple large muscle groups, to include shoulders, arms, core, and legs, at one time. The repetitive pull, kick and recover under