



What Officers Need to Know About the Annual Physical Fitness Test

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**SCIENTIST PROFESSIONAL ADVISORY COMMITTEE (SCIPAC)
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Key Information

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- All officers must do the APFT yearly to maintain the physical fitness basic readiness requirement
- The revised APFT became effective 1 January 2016
- **It is important for officers to start training in advance of the expiration of their APFT to ensure they can meet the new standards.**
- Officers who are unable to do a category of exercises (e.g., cardiorespiratory endurance) due to a medical limitation can request a medical waiver for that component and will complete the rest of the APFT

Background

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APFT Working Group

Goals

NAME	CATEGORY
RADM Sarah Linde	Physician
CAPT Bart Drinkard	Therapist
CAPT Scott Gaustad	Therapist
CAPT Bernard Parker	Physician
CAPT Richard Troiano	Scientist
CDR Dan Brum	Pharmacist
CDR Juliette Touré	Pharmacist
LCDR Elizabeth DeGrange	HSO
LT Katrina Piercy (lead)	Dietitian

- Review, evaluate, and recommend a revised evidence-based physical readiness standard
 - Existing policy and practices
 - Other uniformed service standards
 - Scientific evidence

Why Should Everyone do the APFT?

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- Condition of service to be basic ready
- Support Corps missions and activities required while on deployment
- Accountability
- Parity with services and across Corps
- Promote and model a healthy lifestyle

Advantages of the APFT

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1. **NEW** exercise options
2. **EVIDENCE-BASED** standards based on current science
3. **MORE** age bands in 5 year increments up to age 65+
4. **FLEXIBLE** options for documenting APFT
5. **PARITY** with other services for scoring
6. **RECOGNITION** for high achievement

Former APFT vs. Current APFT

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PHYSICAL FITNESS COMPONENT	FORMER APFT EXERCISES	CURRENT APFT EXERCISES
Cardiorespiratory Endurance	Run - 1.5 mi Swim - 450 m/500 yd	Run - 1.5 mi Swim - 450 m/500 yd Elliptical – 12 min Stationary Bike – 12 min
Upper Body Endurance	Push-ups - 2 min	Push-ups - 2 min
Core Endurance	Side-bridge Sit-ups - 2 min	Plank Side-bridge Sit-ups - 2 min
Flexibility	None	Seated Toe Touch

NEW Exercise Options

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- **Cardiorespiratory Endurance:** Elliptical and stationary bike
 - Currently used by Navy and Army
 - Calculation based on 12 minutes of exercise
- **Core Endurance:** Plank
 - Valid, safe measure of core endurance with less pressure on elbow and shoulder vs. side bridge
 - No other uniformed service doing this exercise
- **Flexibility:** Seated toe touch
 - Increased flexibility can prevent injury
 - No equipment required



Approved Elliptical Machines

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Approved Elliptical Machines	Offset Value
LifeFitness 91X / Classic Series (CLSX)	-1.585
LifeFitness 91Xi	-1.585
LifeFitness 95Xi (Quiet Drive Version Only)	-20.743
LifeFitness 95X (Model may be Inspire or Engage)	22.980
LifeFitness CT 9500	-32.947
LifeFitness CT 9500 HR	-32.947
Nautilus (Model E9 16)	-12.855
Precor EFX-556NAVY / EFX-556iNAVY	-24.322
Precor EFX-556i	5.769
Precor EFX-576i / EFX-835	5.769
Technogym Excite Synchro 700 (Series)	-22.502

Approved Stationary Bikes

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Approved Stationary Bikes	Offset Values
Life Fitness 95Ci	0
Life Fitness 95CiXXL	0
Life Fitness Classic Series (CLSC)	0

- Finding the approved machine list:
 - CCMIS website (dcp.psc.gov/ccmis) → Readiness → Annual Physical Fitness Test → POM and APFT Instructions

Rationale for Specific Equipment

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- Equipment list adopted from the Navy
- Machines have been validated and tested to determine offset values
- It is not possible to get a waiver to use other types of elliptical machines or stationary bikes
- Using other equipment will lead to inaccurate APFT results
- APFT Advisory Council will monitor Navy's approved list and make recommendations to update PHS APFT list

EVIDENCE-BASED Standards

COMPONENT	EXERCISE OPTION	REFERENCE
Cardiorespiratory Endurance	Run*	US Navy
	Swim	US Navy
	Elliptical	US Navy
	Stationary Bike	US Navy
Upper Body Endurance	Push-ups*	US Navy
Core Endurance	Plank*	Peterson et al. 2013
	Side Bridge	US Coast Guard
	Sit-ups	US Navy
Flexibility	Seated Toe Touch*	Previous US Navy exercise

*Indicates main APFT Exercise. Exercises without asterisks are APFT alternatives.

MORE Age Bands

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- **5 year increments instead of 10 year increments**
 - Former APFT: **4 sets of standards** by age (20-29, 30-39, 40-49, 50+)
 - Current APFT: **10 sets of standards** by age (20-24, 25-29, 30-34, etc.)

- **Standards continue to vary for higher age bands**
 - Former APFT: highest age is **50 and older**
 - Current APFT: highest age is **65 and older**

FLEXIBLE Options to Document APFT

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- **Options for testing official verification:**
 1. Another officer (current method)
 2. Another officer remotely (via cell phone or computer video)
 3. Another federal employee adult non officer
- **Direct Access has updated input options for the APFT**
 - Input email address of person observing APFT for auditing purposes
- **Form PHS-7044**
 - Retain copy for personal records (no longer send to Medical Affairs)

PARITY with other Services with Scoring

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4 Fitness Components

- 4 fitness components
 - Cardiorespiratory endurance (4 exercise options)
 - Upper body endurance (1 exercise)
 - Core endurance (3 exercise options)
 - Flexibility (1 exercise)
 - ✦ Scored as satisfactory/unsatisfactory

6 Levels for Each Exercise

- **Maximum** = 100 points
- **Outstanding** = 90 points
- **Excellent** = 75 points
- **Good** = 60
- **Satisfactory** = 45 points
- **Failure** = <45 points

Scoring System

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Overall Score

- Average of 3 components (cardiorespiratory, upper body, core endurance)
 - **Must pass ALL components to pass APFT**
- Seated toe touch
 - Satisfactory: doesn't change APFT level
 - Unsatisfactory: lowers APFT by one level
- Encourages officers to do their best on each exercise

Average of 3 Exercises = Overall Score

- **Maximum:** 100 points
- **Outstanding:** 90-99 points
- **Excellent:** 75-89 points
- **Good:** 60-74 points
- **Satisfactory:** 45-59 points
- **Failure:** <45 points

Field Medical Readiness Badge (FMRB) level: Excellent

Scoring Examples

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EXERCISE	SCORE	POINTS
Run	Outstanding	90
Push-ups	Good	60
Plank	Excellent	75
Toe touch	Satisfactory	N/A

Overall APFT score:
EXCELLENT

- $90 + 60 + 75 = 225$
- $225 \div 3 = 75$ points
 - Excellent = 75-89 points

EXERCISE	SCORE	POINTS
Elliptical	Satisfactory	45
Push-ups	Satisfactory	45
Side Bridge	Satisfactory	45
Toe touch	Unsatisfactory	N/A

Overall APFT score:
FAILURE

- $45 + 45 + 45 = 135$
- $135 \div 3 = 45$ points
 - Satisfactory = 45-59 points
- The overall score is one level lower due to the unsatisfactory score on the seated toe touch

Scoring Walk Through

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Example:

44 year old male

- Run: *13:42 seconds*
- Push-ups: *42*
- Plank: *135 seconds*
- Seated Toe Touch: *Satisfactory*

Table 1. Standards for Males

Age for Males	20-24	25-29	30-34	35-39	40-44
CARDIORESPIRATORY ENDURANCE					
<i>1.5 mile run (minutes)</i>					
Maximum (100 pts)	8:30	8:55	9:20	9:25	9:30
Outstanding (90 pts)	9:15	9:38	10:00	10:08	10:15
Excellent (75 pts)	10:30	10:52	11:15	11:23	11:45
Good (60 pts)	12:00	12:53	13:45	14:08	14:30
Satisfactory (45 pts)	15:12	15:12	15:52	15:52	16:28
Failure (0 pts)	>15:12	>15:12	>15:52	>15:52	>16:28
UPPER BODY ENDURANCE					
<i>Push Up (number performed in 2 minutes)</i>					
Maximum (100 pts)	87	84	80	76	72
Outstanding (90 pts)	81	77	74	70	67
Excellent (75 pts)	71	67	64	60	56
Good (60 pts)	47	44	41	37	34
Satisfactory (45 pts)	37	34	31	27	24
Failure (0 pts)	<37	<34	<31	<27	<24
CORE ENDURANCE					
<i>Plank (seconds)</i>					
Maximum (100 pts)	180	180	180	180	180
Outstanding (90 pts)	150	150	150	150	150
Excellent (75 pts)	120	120	120	120	120
Good (60 pts)	90	90	90	90	90
Satisfactory (45 pts)	60	60	60	60	60
Failure (0 pts)	<60	<60	<60	<60	<60

How to Determine Score

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- **Example:**

44 year old male

- Run: *13:42 seconds*
- Push-ups: *42*
- Plank: *135 seconds*
- Seated Toe Touch:
Satisfactory

EXERCISE	SCORE	POINTS
Run	Good	60
Push-ups	Good	60
Plank	Excellent	75
Toe touch	Satisfactory	N/A

Overall APFT score:

GOOD

$$60 + 60 + 75 = 195$$

$$195 \div 3 = 65 \text{ points}$$

Good = 60-74 points

How to Fill Out PHS-7044

OFFICER'S NAME (Print last, first, middle initial) Smith, John, E.		EMPLOYEE ID 2 0 0 0 0 0	RANK/GRADE O-5
<input type="checkbox"/> Tested in person with officer (any Service)	<input type="checkbox"/> Tested in person with federal employee non-officer	DATE TESTED (mm/dd/yy) 03/20/2016	<input checked="" type="checkbox"/> MALE <input type="checkbox"/> FEMALE
SECTION II – BODY MASS INDEX (see instructions for more information)			
Height: 5 (ft) 10 (in)	Weight: 180 (lbs.)	BMI: 25.8 kg/m ²	
SECTION III – ANNUAL PHYSICAL FITNESS TEST (Check the box for each exercise completed and record measurement and point value. Approved elliptical and stationary bikes and the offset values are found in the APFT Procedures. Select ONE exercise for categories A and C). Each officer must complete all categories.			
CATEGORY A – CARDIORESPIRATORY ENDURANCE (perform one of the following)		Category A number of points:	
<input checked="" type="checkbox"/> Run (1.5 mi) 13:42 (time recorded to the nearest second)		60	
<input type="checkbox"/> Swim (450 m) _____ (time recorded to the nearest second)		Elliptical/bike model: _____	
<input type="checkbox"/> Swim (500 yd.) _____ (time recorded to the nearest second)			
<input type="checkbox"/> Elliptical _____ (calories from machine + offset value) ÷ body weight (lbs.)			
<input type="checkbox"/> Stationary Bike _____ (calories from machine + offset value) ÷ body weight (lbs.)			
CATEGORY B – UPPER BODY ENDURANCE		Category B number of points:	
<input checked="" type="checkbox"/> Push - ups 42 (record number completed in 2 minutes)		60	
CATEGORY C – CORE ENDURANCE (perform one of the following)		Category C number of points:	
<input checked="" type="checkbox"/> Plank 135 (record time in seconds that position is held)		75	
<input type="checkbox"/> Side bridge _____ (record time in seconds that position is held)			
<input type="checkbox"/> Sit-ups _____ (record number completed in 2 minutes)			
CATEGORY D – FLEXIBILITY (seated toe touch exercise)		<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory	
<input checked="" type="checkbox"/> Did touch toes (Satisfactory) <input type="checkbox"/> Did not touch toes (Unsatisfactory*) *lowers overall APFT one level			
SECTION IV – SCORING (Calculate overall score and check corresponding APFT level). To pass the APFT, an officer must achieve satisfactory or greater on Category A, B, & C. Scoring unsatisfactory on the seated toe touch lowers the overall APFT score by one level.			
WORKSHEET		APFT LEVEL (check box)	
1. Total number of points from Category A, B, & C: 195		<input type="checkbox"/> Maximum = 100 points (maximum on each exercise)	
2. Divide total in line 1 by 3*: 65		<input type="checkbox"/> Outstanding = 90-99 points	
*Officers who have a medical waiver for a category should only divide by the number of categories completed.		<input type="checkbox"/> Excellent = 75-89 points	
3. If Category D is unsatisfactory, decrease APFT level by one.		<input checked="" type="checkbox"/> Good = 60-74 points	
		<input type="checkbox"/> Satisfactory = 45-59 points	
		<input type="checkbox"/> Failure = <45 points	

Complete Required Sections

- I – Officer Information
- III – Annual Physical Fitness Test (Categories A, B, C, D)
- IV – Scoring^α
- V – Verification of Results

Optional Section (highlighted)

- II – Body Mass Index^β

^α Fillable pdf automatically divides by 3 (boxed).

^β May be required in the future. If using elliptical or stationary bike for cardiorespiratory endurance test, record your weight.

How to Enter into Direct Access (DA)

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*Exam Date: 03/20/2016  Overall Fitness Level: Failure

Evaluator:  *Name:

Department:

Business Phone: Email Address:

Cardio Test

*Test: 1.5 Run  Results: Minutes: 0 Seconds: 0 Score: 0

Core Test

*Test: Crunches  Results: 0 Minutes: 0 Seconds: 0 Score: 0

Upper Body Strength Test

*Test: Pushups  Results: 0 Score: 0

Flexibility Test

*Test: Toe Touch  Results:

Complete All Sections

- Exam Date
- Evaluator
 - Search by Employee ID, first or last name, then Evaluator fields will auto-populate
 - If not in DA database, manually enter Evaluator fields
- Enter results from PHS 7044 (Category A through D)
- Using the drop-down menu, select the type of exercise or “Waived” (if you have a medical waiver for the exercise)
- Overall Fitness Level and Scores will auto-populate based on results entered (highlighted)
- Most importantly – **Click “Save”!**

How to Get a Medical Waiver

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- See questions 21-25 in the Frequently Asked Questions
 - Submit medical documentation from health care provider (HCP) for review and determination of type of waiver.
 - Two types:
 - ✦ Permanent/Long-term – unlikely to improve in the foreseeable future; reviewed periodically
 - ✦ Time-limited – likely to improve within 12 months; has an expiration date (if no date, then will expire at the end of the 3rd month)
 - Submit to the attention of the Medical Reviewing Official (MRO):
 - ✦ Brief written narrative of the purpose and timeframe of the request
 - ✦ HCP should provide a diagnosis, recommended waiver period, and any additional relevant medical evidence supporting the request
 - See Medical Affairs website for contact information.

How to Calculate Score with Medical Waiver

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- **Example:**

44 year old male

- Run: *13:42 seconds*
- Push-ups: *Waived*
- Plank: *135 seconds*
- Seated Toe Touch:
Satisfactory

EXERCISE	SCORE	POINTS
Cardiorespiratory	Good	60
Upper Body	Waived	N/A
Core	Excellent	75
Toe touch	Satisfactory	N/A

Overall APFT score:

GOOD

$$60 + 75 = 135$$

$$135 \div 2 = 67.5 \text{ points}$$

Good = 60-74 points

Medical Waiver – Entering in DA

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- Submit paperwork for a medical waiver **BEFORE** doing the APFT
- Enter APFT results into Direct Access
 - Select “Waived” for components that have been medically waived

Cardio Test

*Test: Results: Minutes: Seconds: Score:

- All medical waivers entered into DA for the APFT will be cross checked by RedDOG for verification

Determine APFT Point Value - Elliptical

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- Table 1 Standards for Males (p. 16)
- Adjusted value of **1.0395 => Good**

Age for Males	20-24	25-29	30-34	35-39	40-44	45-49
<i>Elliptical (calculated values based on 12 minutes of exercise)</i>						
Maximum (100 pts)	1.375	1.364	1.353	1.342	1.331	1.320
Outstanding (90 pts)	1.253	1.242	1.231	1.220	1.209	1.198
Excellent (75 pts)	1.131	1.120	1.109	1.098	1.087	1.076
Good (60 pts)	0.929	0.918	0.907	0.896	0.885	0.874
Satisfactory (45 pts)	0.865	0.854	0.843	0.832	0.821	0.810
Failure (0 pts)	<0.865	<0.854	<0.843	<0.832	<0.821	<0.810

- PHS-7044 Category A (Cardiorespiratory Endurance)
 - Number of Points => **60**
 - Elliptical/Bike Model => **Nautilus Model E9 16**
- Steps to calculate stationary bike APFT point values are similar, except the offset value is zero.

RECOGNITION for High Achievement

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- Recognize officers for achieving high or increasing levels of physical fitness on the APFT
- Three types of recognition (certificate)
 1. Increasing level from prior APFT (e.g., Good to Excellent)*
 2. Achieving maximum or outstanding level
 3. 3 years consecutively achieving maximum or outstanding level

*Recognition applies to those who completed **current** APFT, not APFTs completed prior to 1 January 2016

After some training...

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- Same officer, after training for a while

- Increased calories burned to 210

$$210 + (-12.885) = 197.115$$

$$197.115 \div 180 = 1.095$$

- OR Weight loss of 8 pounds

$$200 + (-12.885) = 187.115$$

$$197.115 \div 172 = 1.088$$

Table 1 Standard for Males **Increased from Good to Excellent!**

Elliptical (calculated values based on 12 minutes of exercise)

Maximum (100 pts)	1.375	1.364	1.353	1.342	1.331	1.320
Outstanding (90 pts)	1.253	1.242	1.231	1.220	1.209	1.198
Excellent (75 pts)	1.131	1.120	1.109	1.098	1.087	1.076
Good (60 pts)	0.929	0.918	0.907	0.896	0.885	0.874
Satisfactory (45 pts)	0.865	0.854	0.843	0.832	0.821	0.810
Failure (0 pts)	<0.865	<0.854	<0.843	<0.832	<0.821	<0.810

And a little more training...

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- Officer works on upper body strengthening
 - Can do 60 push-ups = *Excellent*
- Maintains in Plank and Toe Touch

EXERCISE	SCORE	POINTS
Elliptical	<i>Excellent</i>	<i>75</i>
Push-ups	<i>Excellent</i>	<i>75</i>
Plank	Excellent	75
Toe touch	Satisfactory	N/A

JOAG Readiness & Deployment Workgroup

APFT Team

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- **APFT Team**

- Organizes and promotes APFT group events
- APFT Events calendar:
https://dcp.psc.gov/osg/JOAG/committees_readiness.aspx
- Contact information: LT Katrina Piercy (Katrina.Piercy@hhs.gov)
and LCDR Deborah Hastings (dkh5@cdc.gov)

- **Officer Health & Fitness Promotion Team**

- Tracking federal fitness facilities which have approved elliptical machines and stationary bikes
- Contact information: LCDR Catherine Beer
(Catherine.Beer@fda.hhs.gov)

APFT Advisory Council

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- Transitioned from APFT Working Group
- Serve as point of contact with Cross Category Readiness Workgroup and Professional Advisory Committees
- Developed plan to support officers who had not done an APFT previously
- Stay current on scientific literature and other Uniformed Services' fitness tests
- Make recommendations to senior leadership when necessary

Resources Available on CCMIS

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- **CCMIS website:** dcp.psc.gov/ccmis
 - ✦ **Readiness**
 - **Annual Physical Fitness Test (APFT)**
- **APFT Overview**
- **APFT Procedures & Instructions**
- **Frequently Asked Questions**
- **Updated Form PHS-7044**
- **Policy related:** Memos from RADM Giberson and CAPT Beck on Revised APFT, Manual Circular 337, PPM 04-003, POM
- **Coming soon:**
 - **APFT Instructional Video**
 - **Incentive Program Instructions**

THANK YOU!

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FOR ADDITIONAL INFORMATION:

dcp.psc.gov/ccmis

Readiness tab →

Annual Physical Fitness Test