



Ministry
of Defence

Air Command Secretariat
Spitfire Block
Headquarters Air Command
Royal Air Force
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Buckinghamshire
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Ref. 2014/03769

18 September 2014

Dear [REDACTED]

Thank you for your email dated 24 June 2014 requesting the following information:

1) *For each of the last 10 years, how many RAF servicemen and women have been released from the RAF for being obese or overweight?*

2a) *Does the RAF have a basic, regular fitness test which servicemen and women must take?*

2b) *What does it involve? Eg, running 100m in 14 seconds, 100 press ups etc.*

In relation to the above test:

3) *For each of the last 7 years, how many RAF servicemen and women have failed the basic fitness test?*

By years, I mean calendar years 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 up to June 23.

I am treating your correspondence as a request for information under the Freedom of Information Act (FOIA) 2000. I can confirm that the Ministry of Defence holds some information within the scope of your request. I will answer each question in turn.

1. Information is recorded from January 2005 and 31 March 2014. During that period less than five UK Regular Royal Air Force (RAF) personnel were medically discharged with a principal or contributory cause of obesity. Due to the small numbers and the risk of inadvertently disclosing individual identities this information has not been provided by year.

2a) The RAF has a Fitness Test (FT) which servicemen and women must undertake on a bi-annual basis.

2b) The RAF FT measures aerobic capacity and local muscular endurance. The aim of the FT is to measure an individual's aerobic fitness, predicting a score of Vanadium Oxide (VO₂), the maximal aerobic capacity. This is measured during a Multi Stage Fitness Test (MSFT). The subject must run between two markers set exactly 20 metres apart. The subject must keep up with a series of pre-recorded beeps. The time between each beep progressively increases in speed every minute. This is followed by two muscular endurance tests during which servicemen and women will perform as many press-ups and sit-ups as they can, during one minute for each exercise. Standards are set so that males and females from all age groups have to work equally as hard in order to achieve the minimum standard. Please see attached Annex A for RAF Fitness Standards.

Personnel over the age of 55, or those medically exempt from completing the MSFT, take the Rockport Walk Test (RWT). The RWT is a sub-maximal aerobic fitness test that is used to predict the aerobic capacity (VO₂ max) of an individual. The test requires an individual to walk 1610m (1 mile) as fast as possible. The prediction of VO₂ max is established by inputting data, including weight, Body Mass Index and results obtained throughout the test, into an equation. A pass or fail result is then calculated.

3) Table 1 shows the number of UK Regular RAF personnel that failed a fitness test during the period 1 January 2007 and 23 June 2014. Personnel are only counted once in each year but may be counted in multiple years.

Table 1:

Year	Number of personnel
2007	4253
2008	7609
2009	5912
2010	4232
2011	3625
2012	2440
2013	1987
2014*	902

* - 1 Jan 2014 to 23 June 2014

Section 16 of the FOIA requires public authorities to provide help and assistance to requesters, it may be useful for you to know that personnel who failed a fitness test may have subsequently passed within each calendar year. Therefore I have

provided you with the number of RAF personnel who took at least one FT in a given year and the proportion that passed at least one FT in that year. This information is displayed in Table 2.

Table 2:

Year*	All tests	All passes*	% personnel who pass
2007	25,307	22,787	90%
2008	34,567	30,949	90%
2009	38,049	35,934	94%
2010	37,470	36,165	97%
2011	35,593	34,469	97%
2012	32,861	32,156	98%
2013	29,973	29,421	98%
2014	24,017	23,622	98%

*: Each individual has been counted once in each year they took a fitness test.

*: Personnel have been counted in multiple years, so the sum over several years does not equal the total across all years.

If you are not satisfied with this response or wish to complain about any aspect of the handling of your request, then you should contact me in the first instance. If informal resolution is not possible and you are still dissatisfied then you may apply for an independent internal review by contacting the **Information Rights Compliance Team**, 1st Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.uk). Please note that any request for an internal review must be made within 40 working days of the date on which the attempt to reach informal resolution has come to an end.

If you remain dissatisfied following an internal review, you may take your complaint to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not investigate your case until the MOD internal review process has been completed. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website, <http://www.ico.gov.uk>.

Yours sincerely,

[Redacted signature]

RAF FITNESS TEST STANDARDS

Body Composition.

All Ages	BMI (kg.m ⁻²)	Elevated*	Very Low	Low	Elevated	High	Great Danger	
	All	<18.5*	18.5 – 21.4	21.5 – 24.9	25.0 – 29.9	30.0 – 34.9	35.0 – 39.9	≥40

* Personnel with a BMI of <18.5 are classified as underweight and therefore have an elevated health risk.

Waist Circumference.

All Ages	Waist cm (in)	Very Low	Low	Elevated	High	Great Danger
	Male	< 80 cm (32)	80-93.5 (32-36.9)	94-101.5 (37-39.9)	102-119.5 (40-46.9)	≥120 (47)
Female	<70 cm (28)	70-79.5 (28-31.9)	80-87.5 (32-34.9)	88-109.5 (35-42.9)	≥110 (43)	

Classification of Disease Risk¹ based on BMI and WC.

BMI (kg.m ⁻²)	WC		
	Men < 94 cm Women < 80 cm (Blue → Green)	Men 94 – 101.5 cm Women 80 - 87.5 cm (Yellow)	Men ≥ 102 cm Women ≥ 88 cm (Orange)
Overweight 25.0 - 29.9	No Increased Risk	Elevated Risk	High Risk
Obese Class I 30.0 - 34.9	Elevated Risk	High Risk	High Risk
Obese Class III ≥ 40	High Risk	High Risk	High Risk
		Great Danger	Great Danger

¹ Disease risk for Type 2 diabetes, hypertension and cardiovascular disease.

RAFFT Standards (MSFT/Rockport Walk/Press Up/Sit Up). The RAF's minimum standard is indicated by the Green zone.

Age 17 - 29	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>15.3	11.7 -15.3	9.10 - 11.6	8.1 - 9.9	6.9 - 7.10	5.4 - 6.8	<5.4
	VO ₂	>65.1	52.2	46.5	40.3	36.4	31	<31
	Press-ups	>59	40 - 59	20 - 39	15 - 19	10 - 14	5 - 9	0 - 4
	Sit-ups	>54	41 - 54	35 - 40	30 - 34	25 - 29	20 - 24	0 - 19
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>11.6	8.7 -11.6	7.2 - 8.6	5.7 - 7.1	5.1 - 5.6	4.3 - 4.9	<4.3
	VO ₂	>51.9	42.1	37.1	32.2	30	27.2	<27.2
	Press-ups	>29	20 - 29	10 - 19	7 - 9	5 - 6	3 - 4	0 - 2
	Sit-ups	>51	38 - 51	32 - 37	27 - 31	22 - 26	17-21	0 - 16

Age 30 - 34	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>14.10	10.11-14.10	9.4 - 10.10	7.7 - 9.3	6.6 - 7.6	5.1 - 6.5	<5.1
	VO ₂	>63.2	50.2	44.5	38.9	35	30	<30
	Press-ups	>56	37 - 56	19 - 36	14 - 18	9 - 13	4 - 8	0 - 3
	Sit-ups	>51	38 - 51	32 - 37	27 - 31	22 - 26	17 - 21	0 - 16
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>10.10	8.1 -10.10	6.8 - 7.10	5.4 - 6.7	4.8 - 5.3	3.8 - 4.7	<3.8
	VO ₂	>49.9	40.3	35.7	31	29.1	26.3	<26.3
	Press-ups	>28	19 - 28	9 - 18	6 - 8	4 - 5	2 - 3	0 - 1
	Sit-ups	>48	35 - 48	29 - 34	24 - 28	19 - 23	14 - 18	0 - 13

Age 35 - 39	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>13.11	10.4 - 13.11	8.9 - 10.3	7.5 - 8.8	6.3 - 7.4	4.7 - 6.2	<4.7
	VO ₂	>60.1	48	42.7	38.2	34	28.7	<28.7
	Press-ups	>54	34 - 54	18 - 33	13 - 17	8 - 12	3 - 7	0 - 2
	Sit-ups	>48	35 - 48	29 - 34	24 - 28	19 - 23	14 - 18	0 - 13
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>10.4	7.5 - 10.4	6.4 - 7.4	5.1 - 6.3	4.5 - 4.9	3.2 - 4.4	<3.2
	VO ₂	>48	38.2	34.3	30	28	24.2	<24.2
	Press-ups	>27	18 - 27	8 - 17	5 - 7	3 - 4	1 - 2	0
	Sit-ups	>45	32 - 45	26 - 31	21 - 25	16 - 20	11 - 15	0 - 10

Age 40 - 44	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>12.12	9.10 - 12.12	8.3 - 9.9	6.9 - 8.2	5.9 - 6.8	4.5 - 5.8	<4.5
	VO ₂	>57.1	46.6	40.8	36.9	32.9	28	<28
	Press-ups	>50	31 - 50	17 - 30	12 - 16	7 - 11	2 - 6	0 - 1
	Sit-ups	>45	32 - 45	26 - 31	21 - 25	16 - 20	11 - 15	0 - 10
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>9.9	6.9 - 9.9	5.8 - 6.8	4.8 - 5.7	4.3 - 4.7	2.7 - 4.2	<2.7
	VO ₂	>46.1	36.4	32.5	29.1	27.2	23.5	<23.5
	Press-ups	>25	16 - 25	7 - 15	4 - 6	2 - 3	0 - 1	0
	Sit-ups	>42	29 - 42	23 - 28	18 - 22	13 - 17	8 - 12	0 - 7

Age 45 - 49	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>12.1	9.3 - 12.1	7.7 - 9.2	6.9 - 7.6	5.7 - 6.8	4.3 - 5.6	<4.3
	VO ₂	>54	44.2	38.9	36.4	32.2	27.2	<27.2
	Press-ups	>47	28 - 47	16 - 27	11 - 15	6 - 10	1 - 5	0
	Sit-ups	>42	29 - 42	23 - 28	18 - 22	13 - 17	8 - 12	0 - 7
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>9.2	6.3 - 9.2	5.4 - 6.2	4.5 - 5.3	3.9 - 4.4	2.5 - 3.8	<2.5
	VO ₂	>43.9	34	31	28	26.3	22.7	<22.7
	Press-ups	>23	14 - 23	6 - 13	3 - 5	2	0 - 1	0
	Sit-ups	>39	26 - 39	20 - 25	15 - 19	10 - 14	5 - 9	0 - 4

Age 50 - 54	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>11.7	8.8 - 11.7	7.1 - 8.7	6.6 - 6.9	5.4 - 6.5	4.1 - 5.3	<4.1
	VO ₂	>52.2	42.4	36.9	35	31	26.6	<26.6
	Press-ups	>44	25 - 44	15 - 24	10 - 14	5 - 9	1 - 4	0
	Sit-ups	>39	26 - 39	20 - 25	15 - 19	10 - 14	5 - 9	0 - 4
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	MSFT Level	>8.4	5.7 - 8.4	4.9 - 5.6	4.3 - 4.8	3.3 - 4.2	2.2 - 3.2	<2.2
	VO ₂	>41.1	32.2	29.5	27.2	24.5	21.3	<21.3
	Press-ups	>21	12 - 21	5 - 11	2 - 4	1	0	0
	Sit-ups	>36	23 - 36	17 - 22	12 - 16	7 - 11	2 - 6	0 - 1

Age 55 - 59	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	VO ₂	>47	37	35	34	30	25	<25
	Press-ups	>41	22 - 41	14 - 21	9 - 13	4 - 8	1 - 3	0
	Sit-ups	>36	23 - 36	17 - 22	12 - 16	7 - 11	2 - 6	0 - 1
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	VO ₂	>39	30	28	26	24	21	<21
	Press-ups	>20	11 - 20	4 - 10	1 - 3	0	0	0
	Sit-ups	>33	20 - 33	14 - 19	9 - 13	4 - 8	0 - 3	0

Age 60-64	Male	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	VO ₂	>44	35	32	30	27.9	23	<23
	Press-ups	>38	19-38	13-18	8-12	3-7	1-2	0
	Sit-ups	>33	20-33	14-19	10-13	4-9	1-3	0
	Female	<0.5 x	0.5-1.0 x	1.0 x	2.0 x	4.0 x	>8 x	
	VO ₂	>37	28	26.5	24.5	22.5	19	<19
	Press-ups	>19	10-19	3-9	1-2	0	0	0
	Sit-ups	>30	17-30	11-16	6-10	1-5	0	0