



UK Armed Forces Equal Pay Audit

This report details the findings of the second equal pay audit for the UK Armed Forces. It compares the average salaries of male and female, and white and black and minority ethnic personnel doing broadly equivalent work.

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Responsible statistician: Tri-Service Head of Branch 020 7807 8896 DefStrat-Stat-Tri-Hd@mod.gov.uk

Further information/ mailing list: DefStrat-Stat-Tri-Enquiries@mod.gov.uk

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Key Findings

- Focusing on gender, the Equal Pay Audit for 2018/19, the evidence shows there are a few differences exceeding 3 per cent between the average salaries for male and female personnel in the Regular Armed Forces, accounting for rank and pay scale. The most notable difference is -10.3% for OR-2's in the Royal Navy (RN) Supplement 1.
- Once Time in Rank (TIR) is accounted for, observed notable differentials in the average salaries for male and female personnel disappear in most instances **and all differences are below the 5% threshold for action.**
- For ethnicity, there are pay differentials exceeding 3 per cent for the average salaries of white and BAME personnel when rank and pay scale are considered. The most notable difference is -7.6% for rank OR-2 in the Army.
- After TIR is included in further analysis, there are no notable differences in the average salaries white and BAME personnel received.

Introduction

The Equal Pay Audit (EPA) assesses the equality of pay for all Regular Service Personnel across the three services: the Royal Navy (RN), the Army and the Royal Air Force (RAF). A basis for measuring pay inequalities in the Armed Forces requires a comparison of salaries for staff undertaking similar roles. Therefore, we have compared the pay of personnel in the same service with the same NATO rank on the same pay scale. It is anticipated that this approach will split the population into groups of people doing broadly equivalent work.

It primarily focuses on the differences in the average salaries based on gender and ethnicity. Further analysis concentrates on the differences present for gender and ethnicity once TIR has been accounted for. This is because personnel can increment pay spines (receiving higher pay) as their TIR increases, so long as they are not already on the top spine for their rank.

Analysis produced in this report has some exclusions which are explained below. The population used in this report contains only Regular Service Personnel who have received basic pay and X-factor as recorded on the JPA system during October 2018. The exclusions applied in the analysis are:

- a) Non-Regular sub-populations such as Full Time Reserves (FTRS), Gurkhas and Volunteer Reserves are excluded.
- b) Bespoke pay Spines, targeting specific specialist groups, have been excluded due to low numbers.
- c) Allowances and other Recruitment and Retention payments are excluded.
- d) Personnel for whom no basic pay has been recorded on the JPA system as at 1st November 2018 (during October) are excluded.
- e) Personnel above NATO rank OF-6 have been excluded from gender comparisons due to low numbers of female personnel at these ranks.
- f) Groups containing fewer than 5 personnel have their numbers and average salaries suppressed and subsequently no pay differential is calculated

Further exclusions have been made specifically for the ethnicity analysis:

- a) Personnel who have "No Value" or "Declined to Declare" as their ethnicity have been excluded from percentage calculations.

This is the third Armed Forces Equal Pay Audit report which has been written by Defence Statistics, the first report was produced using data as at 1 October 2010 and the second report using data as at 1 October 2017. Since the previous report, there has not been any changes to the military pay structure. However, between 2010 and 2017, there were reforms such as the shortening of pay scales for Other Ranks and the replacement of Higher and Lower pay spines with 4 Supplements. Results from this audit can be compared to the previous edition as there are no changes to the structure but because of the large reforms between the first and second audit, we cannot directly compare the results to the first audit. However, the overall conclusions can still be compared.

Definitions

Salary refers to the annual rates of basic pay (i.e. Base Pay plus X factor) and reflects the amount an individual received in 2018/19 provided they remained a full-time member of the Armed Forces for the entire year.

X Factor is an additional percentage added to the base salary of Regular Service Personnel (and some Reserve personnel depending on commitment level), reflecting the differences between conditions of service experienced by members of the Armed Forces over a full career and conditions in civilian life.

Salary differential percentages show the difference in salaries of female/BAME personnel as a percentage of salaries received by male/white personnel.

A positive salary differential shows female personnel receive a lower average salary than their male counterparts. A negative salary differential shows female personnel receive a higher average salary than their male counterparts.

UK Regular Forces include both trained and untrained personnel and exclude Gurkhas, Full Time Reserve Service (FTRS) personnel and mobilised reservists.

Black, Asian and Minority Ethnic (BAME) is the terminology normally used in the UK to describe people of non-white descent.

Time in Rank (TIR) is the amount of time in years the individual has been in a specific NATO rank and captures the difference between the flow date and the situation date.

Symbols and conventions

Symbols

- * not applicable
- .. not available, or figures suppressed due to small numbers
- zero

Italic figures are used for percentages and other rates, except where otherwise indicated.

Data Quality and sources

Data Sources

Data on Armed Forces personnel and salaries are obtained from the Joint Personnel Administration (JPA) system, which is updated continuously as a live system.

Data Quality

For Data Quality please consult Annex 1 which provides more detailed information.

Additional information on the assumptions underpinning the analysis in this Audit can be found in Annex 2.

SECTION 1 – Analysis on average annual basic salary by gender

1.1 Summary

Women represent 9.8% of the overall UK Regular Armed Forces on the Main Pay Scale. Across the individual services, the proportion of women in the RN and Army are broadly similar with 8.9% and 8.7% respectively, the RAF has the highest proportion of women at 13.4%. These figures are consistent with the last publication.

Overall there is little difference between male and female basic average salary with males paid 0.6% more on average. The RN is the only service which has a pay differential greater than 3% between males and females, with females paid 5.2% less on average¹. This is also consistent with the previous edition of this Audit, where females in the RN were paid 5.3% less on average. The difference has reduced by 0.2 percentage point and 0.8 percentage point for the Army and the RAF respectively.

Table 1: UK Regular Personnel and their average salaries by service and gender as at 1 Oct 18

	Headcount	Proportion	Average Basic Salary	Basic Salary Differential
All Services	136,488		£33,997	0.6%
<i>Male</i>	123,102	90.2%	£34,017	
<i>Female</i>	13,386	9.8%	£33,806	
Royal Navy	30,688		£34,811	5.2%
<i>Male</i>	27,963	91.1%	£34,973	
<i>Female</i>	2,725	8.9%	£33,150	
Army	75,149		£32,948	-0.4%
<i>Male</i>	68,588	91.3%	£32,937	
<i>Female</i>	6,561	8.7%	£33,063	
Royal Air Force	30,651		£35,752	1.0%
<i>Male</i>	26,551	86.6%	£35,801	
<i>Female</i>	4,100	13.4%	£35,432	

1.2 Comparison of average salaries

Table 2 shows the pay differentials that are evident in the Officers and Other Ranks (ORs) sub-groups for each service.

It should be noted that this is not a valid measure of equal pay since Officers and ORs are split into 7 and 8 NATO-equivalent ranks, respectively, that represent the different levels of seniority and responsibility. The differences in average salary reflect the variations present in the distributions for men and women across respective of rank. A more accurate comparison of salaries can be deduced when looking at ranks on their own, and for ORs this can be broken down further into the different Supplements.

¹ A difference of 3% or more between the average salaries of females/males and BAME/White are deemed material throughout this report.

It is apparent there is a pattern amongst Officers with notable pay differentials overall and within each service. The consistent positive pay differential implies that across the services male Officers are being paid notably more than female Officers. The RN has the most prominent pay differential for Officers at 10.4%, the Army and RAF have differentials of 7.2% and 6.0% respectively.

Regarding ORs, there is not a notable pay differential between males and females across the services. This trend does not hold when looking at the individual services, with the RN and the RAF possessing figures exceeding the threshold value of 3%. Both services show positive notable pay differentials between males and females, consistent with male ORs being paid more than female counterparts.

All the figures in Table 2 are broadly similar to those from the last edition, with the exception of Army ORs, where there has been a 1 percentage point increase in the difference in favour of males.

Table 2: UK Regular personnel on the main pay scale average salaries by gender and Service as at 1 Oct 18

	Officers					Other Ranks			
	Headcount	Proportion	Average Basic Salary	Basic Salary Differential		Headcount	Proportion	Average Basic Salary	Basic Salary Differential
All Services	22,430		£53,077	7.5%	All Services	112,864		£30,335	2.0%
Male	19,703	87.8%	£53,568		Male	102,205	90.6%	£30,393	
Female	2,727	12.2%	£49,528		Female	10,659	9.4%	£29,784	
Royal Navy	5,762		£53,569	10.4%	Royal Navy	24,926		£30,475	5.0%
Male	5,190	90.1%	£54,126		Male	22,773	91.4%	£30,607	
Female	572	9.9%	£48,513		Female	2,153	8.6%	£29,068	
Army	10,329		£53,061	7.2%	Army	63,626		£29,895	0.7%
Male	9,223	89.3%	£53,476		Male	58,171	91.4%	£29,912	
Female	1,106	10.7%	£49,602		Female	5,455	8.6%	£29,710	
RAF	6,339		£52,654	6.0%	RAF	24,312		£31,344	3.4%
Male	5,290	83.5%	£53,180		Male	21,261	87.5%	£31,477	
Female	1,049	16.5%	£50,005		Female	3,051	12.5%	£30,422	

1.3 Officers

Table 3 UK Regular Officers on the main pay scale average salaries by gender, rank and Service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M
Officers	5,762	£53,569		10,329	£53,061		6,339	£52,654	
OF-6 Male	77	£104,947	*	146	£105,472	*	68	£105,023	*
Female	1	..		5	..		3	..	
OF-5 Male	238	£89,942	*	414	£89,917	0.4%	244	£90,947	2.0%
Female	5	..		27	£89,585		22	£89,172	
OF-4 Male	835	£77,298	3.3%	1,387	£76,165	0.7%	782	£77,967	2.6%
Female	57	£74,776		110	£75,654		121	£75,919	
OF-3 Male	1,561	£56,754	2.6%	3,259	£56,732	1.0%	1,257	£56,246	1.3%
Female	180	£55,250		400	£56,155		305	£55,490	
OF-2 Male	1,483	£44,490	-1.4%	2,094	£42,696	0.1%	1,966	£45,214	0.4%
Female	183	£45,133		313	£42,648		390	£45,041	
OF-1 Male	793	£33,966	0.7%	1,454	£33,070	0.3%	836	£33,243	2.8%
Female	120	£33,725		172	£32,967		170	£32,305	
OF-D Male	203	£26,496	0.0%	469	£26,787	0.3%	137	£26,536	-0.4%
Female	26	£26,484		79	£26,702		38	£26,636	

There is a low number of females at OF-6 level which means no inferences can be made on the presence of a pay differential. An identical approach has been adopted for those ranks where there is a female presence of less than 5 throughout this report.

1.3a Gender pay differential at OF-4

From Table 3, there is a pay differential across the services and ranks, however the only area where there is a differential exceeding 3% is OF-4 in the RN. This is an improvement from October 2017 where there were two areas exceeding 3%.

Consistent with previous audits, where there is a difference exceeding 3%, this audit will capture the effect of time in a current job/rank on average salaries. Time in current rank is not readily available on the JPA system, thereby making statistical adjustments for the whole population not practical. Instead, an estimate has been applied in further analysis where notable differentials are observed.

To take the observed differences of TIR into account when making gender comparisons in pay, Table 4 presents adjusted average basic salary figures by gender, and the resultant percentage gender difference in average basic salary. These adjusted averages were derived using the estimated marginal means from ANCOVA analysis to remove the effect which an individual's TIR has on their basic salary, thereby providing a more representative comparison of the average basic salary of males and females at the same rank.

1.3b Adjusting for Time in Rank in the RN OF-4

Table 4 Comparison of average salaries of UK Regular Officers (OF-4) in the RN before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff F/M	Headcount	Adjusted Ave. Salary	% diff F/M
OF-4 Male	835	£77,298	3.3%	835	£77,130	-0.1%
Female	57	£74,776		57	£77,231	

Adjusting for TIR results in the pay differential between females and males to decrease from 3.3% to -0.1%, below the 3% threshold. This shows equality of pay once TIR has been accounted for. A decrease in the pay differential after adjusting for TIR implies that females have a lower TIR on average than males at this rank. This could be due to several possibilities; a recent increase in the proportion of females at this rank, females promoting sooner or females otherwise exiting the rank sooner.

1.4 Other Ranks (ORs) – Supplements

1.4a ORs- Supplement 1

Table 5 UK Regular Other Ranks (Supplement 1) average salaries by gender, rank and Service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M
Other Ranks	4,694	£26,181		19,583	£29,935		8,132	£28,275	
OR-9 Male	67	£49,336	0.5%	341	£48,757	0.0%	224	£49,127	0.5%
Female	13	£49,073		69	£48,778		37	£48,875	
OR-8 Male	9	£44,355	*	986	£43,293	-0.2%	-	-	-
Female	2	..		184	£43,393		-	-	
OR-7 Male	269	£41,735	0.6%	1,452	£39,558	-1.0%	347	£40,862	1.6%
Female	60	£41,483		272	£39,945		114	£40,188	
OR-6 Male	406	£37,443	0.1%	2,181	£36,279	-1.5%	860	£36,892	-0.7%
Female	153	£37,413		386	£36,806		351	£37,153	
OR-4 Male	656	£32,251	0.8%	3,170	£32,005	0.1%	1,449	£32,026	0.2%
Female	241	£31,982		580	£31,971		535	£31,965	
OR-3 Male	4	£30,146	*	3,071	£27,910	0.7%	-	-	-
Female	2	..		692	£27,723		-	-	
OR-2 Male	2,247	£19,087	-10.3%	5,069	£20,874	1.5%	2,333	£23,316	2.1%
Female	565	£21,048		1,130	£20,551		661	£22,824	
OR-1 Male	-	-	-	-	-	-	1,074	£16,913	1.9%
Female	-	-	-	-	-	-	147	£16,588	

1.4ai Gender pay differential at OR-2 for RN

Table 5 shows the pay differential in the ORs for those on Supplement 1. The only notable pay differential present in the above table is OR-2s in the RN. The presence of a material pay differential in the RN is suggestive of male and female personnel receiving different average salaries at the same rank.

As with Officers, TIR is not available so has been estimated in further analysis. OR-2 is the lowest rank in the RN so TIR measures the time between an individual joining the RN and the situation date, in years.

1.4aii Adjusting for Time in Rank in the RN OR-2

Table 6 Comparison of average salaries of UK Regular ORs (OR-2) in the RN before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff F/M	Headcount	Adjusted Ave. Salary	% diff F/M
OR-2 Male	2,247	£19,087	-10.3%	2,247	£19,426	-1.4%
Female	565	£21,048		565	£19,700	

Accounting for TIR pay differential between females and males for OR-2s in the RN drops from -10.3% to -1.4%, below the 3% threshold. This is consistent with equality of pay once TIR has been accounted for.

An increase in the pay differential after adjusting for TIR implies that males have a lower TIR on average than females at this rank. This could be due to a number of possibilities; a recent increase in the proportion of males at this rank or males may be promoted quicker at this rank.

1.4b ORs- Supplement 2

Table 7 UK Regular ORs (Supplement 2) average salaries by gender, rank and Service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M
Other Ranks	9,804	£29,428		31,636	£28,921		9,171	£32,211	
OR-9 Male	237	£49,404	*	284	£48,632	0.1%	249	£49,061	*
Female	5	..		18	£48,599		11	£48,691	
OR-8 Male	166	£45,274	-	1,222	£44,691	0.8%	-	-	-
Female	-	-		35	£44,331		-	-	
OR-7 Male	800	£42,043	0.0%	1,861	£40,876	-0.7%	719	£42,389	1.7%
Female	31	£42,059		66	£41,171		40	£41,660	
OR-6 Male	1,252	£37,903	0.8%	3,457	£37,386	-0.5%	1,630	£38,659	0.7%
Female	75	£37,594		101	£37,554		171	£38,405	
OR-4 Male	1,946	£32,746	0.7%	5,970	£32,576	0.5%	2,455	£33,542	0.5%
Female	149	£32,502		122	£32,428		196	£33,362	
OR-3 Male	594	£27,946	-	6,446	£28,266	1.7%	153	£28,511	-
Female	-	-		200	£27,797		-	-	
OR-2 Male	4,299	£21,678	-0.9%	11,616	£20,770	2.9%	3,187	£24,992	5.6%
Female	250	£21,878		238	£20,175		282	£23,597	
OR-1 Male	-	-	-	-	-	-	70	£17,818	6.9%
Female	-	-		-	-		8	£16,591	

1.4bi Gender pay differentials at OR-1 and OR-2

From Table 7, the only pay differentials evident above are OR-1s and OR-2s in the RAF. It is an indication females and males are paid differently, with a differential of 6.9% at OR-1 and 5.6% at OR-2. A positive pay differential implies males are paid more than females.

1.4bii Adjusting for TIR in the RAF OR-1 - Supplement 2

Table 10 Comparison of average salaries of UK Regular OR-1s (Supplement 2) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff F/M	Headcount	Adjusted Ave. Salary	% diff F/M
OR-1 Male	70	£17,818	6.9%	70	£17,824	7.2%
Female	8	£16,591		8	£16,539	

Once the TIR is accounted for, the pay differential between females and males has increased from 6.9% to 7.2%, which is still above the threshold for action of 5%. Considering TIR has little effect on this population, because personnel spend very little at this rank before receiving a promotion. The reason for the gap is that there are very few females in this population and most of them are on NERP.

1.4biii Adjusting for TIR in the RAF OR-2 - Supplement 2

Table 11 Comparison of average salaries of UK Regular OR-2s (Supplement 2) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff F/M	Headcount	Adjusted Ave. Salary	% diff F/M
OR-2 Male	3,187	£24,992	5.6%	3,187	£24,946	3.3%
Female	282	£23,597		282	£24,118	

By accounting for TIR, the pay differential reduces from 5.6% to 3.3%, which is still above the 3% threshold, but below the threshold for action of 5%.

1.4c Other Ranks (ORs)- Supplement 3

Table 12 UK Regular ORs (Supplement 3) average salaries by gender, rank and Service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M	Headcount	Ave. Salary	% diff F/M
Other Ranks	10,343	£33,223		12,248	£32,207		7,008	£33,771	
OR-9 Male	585	£49,407	-0.3%	509	£48,693	0.2%	193	£49,279	0.8%
Female	13	£49,531		33	£48,598		17	£48,880	
OR-8 Male	137	£46,986	-	1,063	£46,332	-0.1%			
Female				87	£46,378				
OR-7 Male	1,514	£44,528	0.2%	1,398	£42,329	-0.1%	937	£43,773	1.4%
Female	65	£44,437		112	£42,352		65	£43,171	
OR-6 Male	1,758	£38,687	0.2%	1,202	£37,951	0.3%	1,475	£38,885	-0.1%
Female	110	£38,595		157	£37,834		139	£38,943	
OR-4 Male	2,467	£33,015	0.0%	1,674	£32,960	0.5%	1,488	£33,642	0.4%
Female	201	£33,023		257	£32,784		103	£33,501	
OR-3 Male	85	£29,132	-	1,968	£28,871	1.4%			
Female				290	£28,468				
OR-2 Male	3,193	£21,841	-1.8%	3,080	£20,292	3.9%	2,407	£25,707	6.9%
Female	215	£22,234		418	£19,496		174	£23,925	
OR-1 Male							10	£18,859	*
Female	-	-		-	-		-	-	

1.4ci Gender pay differentials at OR-2

In Table 11, there is a pay differential between males and females exceeding the 3% for the Army and RAF at OR-2.

1.4cii Adjusting for TIR in the RN OR-2

Table 12 Comparison of average salaries of UK Regular ORs (OR-2) in the Army before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff F/M	Headcount	Adjusted Ave. Salary	% diff F/M
OR-2 Male	3,080	£20,292	3.9%	3,080	£20,218	0.9%
Female	418	£19,496		418	£20,042	

By accounting for TIR the pay differential decreases between males and females from 3.9% to 0.9%, below the 3% threshold. This shows equality of pay once TIR has been accounted for.

Table 13 Comparison of average salaries of UK Regular ORs (OR-2) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff F/M	Headcount	Adjusted Ave. Salary	% diff F/M
OR-2 Male	2,407	£25,707	6.9%	2,407	£25,663	4.4%
Female	174	£23,925		174	£24,531	

Once TIR is included, the pay differential between males and females remains notable with a decrease from 6.9% to 4.4%, which is still above the 3% threshold but below the 5% threshold for action. This shows there is no equality of pay once TIR has been accounted for.

Further analysis has been undertaken to assess if there are other factors which could explain the difference in salaries between females and males in this instance. It was identified that some personnel at this rank are on a different pay spine called New Entrant Rate of Pay (NERP) that is assigned to new joiners to the services within the first 6 months. This salary differs substantially

from the salary of other personnel at this rank hence the difference in average salaries could be attributed to this factor.

SECTION 2 – Analysis on average annual basic salary by ethnicity

2.1 Summary

Black, Asian and Minority Ethnic (BAME) comprise 7.8% of the UK Regular Armed Forces personnel on the Main Pay Scale. The RN and RAF have similar proportions of BAME personnel with 4.1% and 2.4% respectively, the Army has the largest proportion of BAME personnel at 11.5%.

Across all services, the pay differential between white and BAME personnel is 11.4% which exceeds the 3% threshold. These pay differentials are present in all the individual services with the RN having the largest difference of 14.3%. A positive pay differential implies BAME personnel receive a lower salary than white personnel, irrespective of rank.

Table 14 UK Regular Personnel and their average salaries by service and ethnicity as at 1 Oct 18

	Headcount	Proportion	Average Basic Salary	Basic Salary Differential
All Services	136,488		£33,997	
<i>White</i>	124,815	92.2%	£34,260	11.4%
<i>BAME</i>	10,543	7.8%	£30,339	
<i>Not known</i>	1,130		£39,061	
Royal Navy	30,688		£34,811	
<i>White</i>	29,266	95.9%	£35,007	14.3%
<i>BAME</i>	1,237	4.1%	£30,006	
<i>Not known</i>	185		£35,908	
Army	75,149		£32,948	
<i>White</i>	66,275	88.5%	£33,331	9.2%
<i>BAME</i>	8,593	11.5%	£30,279	
<i>Not known</i>	281		£24,325	
Royal Air Force	30,651		£35,752	
<i>White</i>	29,274	97.6%	£35,615	11.1%
<i>BAME</i>	713	2.4%	£31,646	
<i>Not known</i>	664		£46,176	

2.2 Comparison of average salaries

From Table 15 below, we can look at the pay differentials between white and BAME personnel for Officers and ORs sub groups for each service.

There is a notable pay differential for white and BAME Officers which exceeds the 3% threshold. A positive pay differential implies white Officers and ORs receive a higher average salary than BAME Officers and ORs. After breaking down to individual services, the Army Other Ranks is the only area with no notable pay differential, implying BAME and white personnel receive equal pay. The figures are broadly similar to the previous edition, with the exception of RAF Officers which has increased by 8.3 percentage points, this is due to an increase in BAME Officers in the RAF, these personnel have come in a lower levels and brought the average pay down.

Table 15 UK Regular personnel average salaries by ethnicity and service as at 1 Oct 18

Officers					Other Ranks				
	Headcount	Proportion	Average Basic Salary	Basic Salary Differential		Headcount	Proportion	Average Basic Salary	Basic Salary Differential
All Services	22,430		£53,077	6.5%	All Services	112,864		£30,335	3.3%
White	21,636	97.7%	£53,067		White	102,081	91.1%	£30,411	
BAME	506	2.3%	£49,639		BAME	9,944	8.9%	£29,415	
Not known	288		£59,801		Not known	839		£32,014	
Royal Navy	5,762		£53,569	7.3%	Royal Navy	24,926		£30,475	8.0%
White	5,618	98.1%	£53,680		White	23,648	95.4%	£30,571	
BAME	108	1.9%	£49,781		BAME	1,129	4.6%	£28,114	
Not known	36		£47,690		Not known	149		£33,061	
Army	10,329		£53,061	4.9%	Army	63,626		£29,895	0.9%
White	10,033	97.4%	£53,093		White	55,144	87.0%	£29,971	
BAME	269	2.6%	£50,508		BAME	8,231	13.0%	£29,687	
Not known	27		£66,520		Not known	251		£19,851	
RAF	6,339		£52,654	9.0%	RAF	24,312		£31,344	10.2%
White	5,985	97.9%	£52,450		White	23,289	97.6%	£31,289	
BAME	129	2.1%	£47,706		BAME	584	2.4%	£28,099	
Not known	225		£60,932		Not known	439		£38,612	

2.3 Officers

Table 16 UK Regular Officers average salaries by ethnicity, rank and service as at 1 Oct 18

Officers	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White
Officers	5,762	£53,569		10,329	£53,061		6,339	£52,654	
OF-6 White	77	£104,934	*	151	£105,479	*	70	£105,000	*
BAME	1	..		-	-		-	-	
Unknown	-	..		-	-		1	..	
OF-5 White	238	£89,917	*	424	£89,889	-0.1%	243	£90,958	*
BAME	3	..		13	£90,001		5	£90,624	
Unknown	2	..		4	..		18	£88,727	
OF-4 White	878	£77,123	0.1%	1,463	£76,145	1.5%	836	£77,839	-0.4%
BAME	12	£77,083		23	£74,984		14	£78,147	
Unknown	2	..		11	£76,147		53	£75,249	
OF-3 White	1,699	£56,600	-0.3%	3,548	£56,665	0.0%	1,453	£56,045	0.5%
BAME	27	£56,758		104	£56,686		21	£55,781	
Unknown	15	£56,055		7	£58,201		88	£57,052	
OF-2 White	1,625	£44,574	0.9%	2,340	£42,693	0.4%	2,247	£45,145	0.4%
BAME	37	£44,166		64	£42,533		49	£44,977	
Unknown	4	..		3	..		60	£46,856	
OF-1 White	889	£33,931	-0.6%	1,571	£33,061	0.1%	970	£33,095	3.2%
BAME	22	£34,130		54	£33,020		31	£32,035	
Unknown	2	..		1	..		5	£37,658	
OF-D White	212	£26,494	0.0%	536	£26,781	1.0%	166	£26,561	*
BAME	6	£26,504		11	£26,504		9	£26,504	
Unknown	11	£26,504		1	..		-	-	

2.3a Ethnicity pay differential at OF-1

From Table 16, it can be seen that the only notable ethnicity pay gap differential is at OF-1 in the RAF where the differential is 3.2%, which is above the threshold for further analysis. The presence of a significant pay differential warrants further analysis that accounts for the effect of TIR as previously shown in the gender section.

Table 17 Comparison of average salaries of UK Regular Officers (OF-1) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OF-1 Male	970	£33,095	3.2%	971	£33,095	3.1%
Female	31	£32,035		31	£32,063	

Table 17 shows that after accounting for TIR, there is only a slight reduction in the pay differential. This is because personnel at OF-1 promote quickly and so this has little effect on the analysis. The gap is still above 3%, demonstrating that white personnel receive more than BAME personnel at this level, but it is below the 5% threshold for action.

2.4 Other Ranks – Supplements

2.4a ORs- Supplement 1

Table 18 UK Regular ORs (Supplement 1) average salaries by ethnicity, rank and service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White
Other Ranks	4,694	£26,181		19,583	£29,935		8,132	£28,275	
OR-9 White	79	£49,280	-	397	£48,763	0.3%	250	£49,096	-0.5%
BAME	-	-	-	12	£48,624	-	5	£49,330	-
Unknown	1	..	-	1	..	-	6	£48,670	-
OR-8 White	11	£44,120	-	1,074	£43,362	1.5%	-	-	-
BAME	-	-	-	96	£42,705	-	-	-	-
Unknown	-	-	-	-	-	-	-	-	-
OR-7 White	317	£41,682	-0.8%	1,459	£39,675	0.9%	433	£40,701	1.0%
BAME	11	£41,997	-	262	£39,302	-	11	£40,298	-
Unknown	1	..	-	3	..	-	17	£40,804	-
OR-6 White	518	£37,447	0.6%	1,920	£36,476	1.3%	1,150	£36,970	0.2%
BAME	40	£37,222	-	645	£36,007	-	23	£36,884	-
Unknown	1	..	-	2	..	-	38	£36,943	-
OR-4 White	791	£32,179	-0.2%	2,684	£32,021	0.2%	1,915	£31,992	0.2%
BAME	103	£32,258	-	1,062	£31,945	-	48	£31,927	-
Unknown	3	..	-	4	..	-	21	£33,783	-
OR-3 White	6	£29,981	-	2,759	£27,795	-1.1%	-	-	-
BAME	-	-	-	1,001	£28,098	-	-	-	-
Unknown	-	-	-	3	..	-	-	-	-
OR-2 White	2,544	£19,404	-4.0%	4,766	£20,726	-2.8%	2,867	£23,246	4.0%
BAME	255	£20,176	-	1,349	£21,316	-	122	£22,313	-
Unknown	13	£20,942	-	84	£17,812	-	5	£23,045	-
OR-1 White	-	-	-	-	-	-	1,166	£16,883	1.7%
BAME	-	-	-	-	-	-	53	£16,599	-
Unknown	-	-	-	-	-	-	2	..	-

2.4ai Ethnicity pay differentials at OR-2

The only pay differential exceeding the 3% threshold exists for OR-2s in the RN and RAF, with a difference of -4.0% and 4.0% respectively. A negative pay differential in the RN implies BAME OR-2s receive a higher salary than white OR-2s.

2.4aii Adjusting for TIR in the RN OR-2

Table 19 Comparison of average salaries of UK Regular ORs (OR-2) in the RN before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OR-2 White	2,544	£19,404	-4.0%	2,544	£19,464	-1.0%
BAME	255	£20,176		255	£19,664	

Once TIR is accounted for, the absolute pay differential between BAME and white reduces from -4.0% to -1.0%, which is below 3% threshold. This finding shows there is equality of pay once TIR is accounted for.

An increase in the pay differential value after adjusting for TIR implies that white personnel have a lower TIR on average than BAME personnel at this rank. This could be due to a number of possibilities; a recent increase in the proportion of white personnel at this rank, white personnel promoting sooner or white personnel otherwise exiting the rank sooner.

Table 20 Comparison of average salaries of UK Regular ORs (OR-2) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OR-2 White	2,867	£23,246	4.0%	2,867	£23,222	1.1%
BAME	122	£22,313		122	£22,964	

Table 20 shows that after accounting for TIR, the pay differential reduces from 4.0% to 1.1%, which is below the 3% threshold.

2.4b ORs- Supplement 2

Table 21 UK Regular ORs (Supplement 2) average salaries by ethnicity, rank and service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White
Other Ranks	9,804	£29,428		31,636	£28,921		9,171	£32,211	
OR-9 White	240	£49,409	*	296	£48,618	-1.5%	243	£49,047	*
BAME	2	..		5	£49,366		4	..	
Unknown	-	-		1	..		13	£49,006	
OR-8 White	162	£45,280	*	1,217	£44,683	0.1%	-	-	-
BAME	1	..		38	£44,653		-	-	
Unknown	3	..		2	..		-	-	
OR-7 White	809	£42,052	1.0%	1,806	£40,891	0.2%	722	£42,354	-4.4%
BAME	9	£41,622		120	£40,806		6	£44,231	
Unknown	13	£41,770		1	..		31	£41,907	
OR-6 White	1,270	£37,941	4.1%	3,223	£37,392	0.0%	1,689	£38,614	-0.8%
BAME	40	£36,368		333	£37,389		23	£38,940	
Unknown	17	£37,379		2	..		89	£38,938	
OR-4 White	1,943	£32,734	0.7%	5,373	£32,541	-0.8%	2,567	£33,505	-1.0%
BAME	113	£32,510		715	£32,811		47	£33,832	
Unknown	39	£33,109		4	..		37	£34,796	
OR-3 White	565	£27,956	1.2%	5,803	£28,177	-2.1%	143	£28,467	-2.3%
BAME	26	£27,617		841	£28,772		9	£29,117	
Unknown	3	..		2	..		1	..	
OR-2 White	4,309	£21,649	-2.9%	10,920	£20,664	-7.6%	3,362	£24,906	2.7%
BAME	221	£22,270		856	£22,227		98	£24,231	
Unknown	19	£23,915		78	£17,729		9	£21,652	
OR-1 White	-	-	-	-	-	-	77	£17,677	*
BAME	-	-	-	-	-	-	1	..	
Unknown	-	-	-	-	-	-	-	-	

2.4bi Gender pay differentials at OR-2, OR-6 and OR-7

Pay differentials present are OR-2s in the Army which has a -7.6% differential, OR-6s in the RN, which has a 4.1% differential and OR-7s in the RAF, which has a -4.4% differential. A negative pay differential implies BAME personnel are paid more than white personnel.

2.4bii Adjusting for TIR in the RN OR-6

Table 22 Comparison of average salaries of UK Regular ORs (OR-6) in the RN before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OR-6 White	1,270	£37,941	4.1%	1,270	£37,914	2.3%
BAME	40	£36,368		40	£37,024	

With TIR adjusted for, the absolute pay differential between BAME and white personnel decreases from 4.1% to 2.3%. This demonstrates equality of pay once TIR has been accounted for.

2.4biii Adjusting for TIR in the Army OR-2

Table 23 Comparison of average salaries of UK Regular ORs (OR-2) in the Army before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OR-2 White	10,920	£20,664	-7.6%	10,920	£20,752	-0.8%
BAME	856	£22,227		856	£20,912	

The exclusion of TIR, results in the absolute pay differential decreasing between BAME and white personnel from -7.6% to -0.8%, falls below the 3% threshold. This shows equality of pay once TIR has been accounted for. This result implies that BAME SP have a higher TIR on average than white SP at this rank

Table 24 Comparison of average salaries of UK Regular ORs (OR-7) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OR-7 White	722	£42,354	-4.4%	722	£42,358	-3.8%
BAME	6	£44,231		6	£43,983	

Accounting for TIR, reduces the pay differential from -4.4% to -3.8%. The gap is still above 3%, demonstrating that BAME personnel receive more than White personnel at this level, but it is below the 5% threshold for action.

2.4c ORs- Supplement 3

Table 23 UK Regular ORs (Supplement 3) average salaries by ethnicity, rank and Service as at 1 Oct 18

	Royal Navy			Army			Royal Air Force		
	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White	Headcount	Ave. Salary	% diff BAME/White
Other Ranks	10,343	£33,223		12,248	£32,207		7,008	£33,771	
OR-9 White	592	£49,412	0.6%	529	£48,689	*	202	£49,258	*
BAME	4	£49,134		12	£48,600		2	£48,578	
Unknown	2	..		1	£48,438		6	£49,080	
OR-8 White	133	£46,987	*	1,082	£46,337	0.0%			
BAME	2	..		67	£46,316				
Unknown	2	..		1	£45,914				
OR-7 White	1,536	£44,541	1.5%	1,379	£42,314	-0.4%	936	£43,733	0.1%
BAME	39	£43,862		129	£42,491		12	£43,691	
Unknown	4	..		2	£43,019		54	£43,758	
OR-6 White	1,792	£38,690	0.5%	1,212	£37,918	-0.5%	1,516	£38,856	-1.9%
BAME	69	£38,483		146	£38,100		22	£39,589	
Unknown	7	£38,438		1	£37,743		76	£39,380	
OR-4 White	2,561	£33,009	-0.5%	1,775	£32,928	-0.4%	1,536	£33,616	1.3%
BAME	94	£33,161		154	£33,048		26	£33,190	
Unknown	13	£33,176		2	£32,535		29	£34,953	
OR-3 White	82	£29,137	*	2,084	£28,812	-0.3%			
BAME	3	..		174	£28,911				
Unknown	-	-		-	-		-	-	
OR-2 White	3,304	£21,846	-2.7%	3,234	£20,226	-2.8%	2,504	£25,614	3.5%
BAME	97	£22,443		207	£20,788		72	£24,706	
Unknown	7	£23,022		57	£16,376		5	£24,351	
OR-1 White	-	-	-	-	-	*	10	£18,859	*
BAME	-	-		-	-		-	-	
Unknown	-	-		-	-		-	-	

2.4ci Ethnicity pay differentials at OR-2

The only notable pay differentials between BAME and white SP in this table are OR-2s in the RAF, which has a gap of 3.5%, indicative of white personnel receiving a higher average salary than BAME personnel. The presence of sufficient pay differentials warrants further investigation which considers the effect of TIR.

2.4cii Adjusting for TIR in the RAF OR-2

Table 24 Comparison of average salaries of UK Regular ORs (OR-2) in the RAF before/after accounting for TIR as at 1 Oct 18

	Headcount	Ave. Salary	% diff BAME/White	Headcount	Adjusted Ave. Salary	% diff BAME/White
OR-2 White	2,504	£25,614	3.5%	2,504	£25,590	0.4%
BAME	72	£24,706		72	£25,496	

The addition of TIR results in the pay differential decreasing between BAME and white personnel from 3.5% to 0.4%, falls below the 3% threshold. This shows equality of pay once TIR has been accounted for. This result implies that white have a lower TIR on average than BAME personnel at this rank.

SECTION 3 – Conclusion

A basis for measuring pay inequalities in the Armed Forces requires a comparison of salaries for staff undertaking similar roles. Therefore, the pay of personnel in the same service, with the same NATO rank, on the same pay scale was compared, in anticipation that this approach splits the population into groups of people doing broadly equivalent work.

Initial analysis that accounted for service, rank and pay scale shows that for the most part, there are only minor (less than 3%) differences in average pay within these groupings. However, there are a few groups showing pay differentials exceeding the 3% threshold for male and female personnel in the Armed Forces. The differences were largely observed at lower ranks for all, with the largest differential being -10.3% for the RN at OR-2.

Personnel can increment in pay spines as their time in rank increases so long as they are not already at the top of the spine. Although the number of spine points have been shortened as result of pay reforms. TIR does still impact the average salary. The effect of TIR on the average salaries of personnel was investigated in further analysis where notable differentials were observed. Overall, the amount of time spent in rank was found to be a contributing factor to pay differentials.

After adjustments for TIR, most pay differentials are below the 3% threshold and all differentials are below 5% (except RAF OR-1), so based on the guidance from the Equality and Human Rights Commission (EHRC) no action is required to close the differential. Only three differentials above 3% are present after this adjustment, the OR-1 and OR-2 on Supplement 2 and OR-2 on Supplement 3 in the RAF, where female personnel receive an annual salary lower than their male counterparts.

Similarly, analysis that considered service, rank and pay scale found few pay differentials deemed notable for white and BAME personnel in the Armed Forces. Consistent with observations for gender, these differentials were found at the lower ranks and the largest difference was -7.6% for the Army on Supplement 2. Only two differentials above 3% are present after the TIR adjustment, these are OF-1 in RAF and OR-7 on Supplement 2 in RAF.

This analysis suggests that once service, rank, pay scale and TIR are accounted for there is equality of basic pay for Regulars on the main pay scale irrespective of ethnicity or gender.

Appendices

1. Data Quality issues

Time in Rank (TIR)

A person's TIR is calculated as the difference between the situation date and their latest intake date or their substantive promotion date, depending on how the person entered their current rank. These fields are taken from JPA, which is known to have issues such as administrative errors.

2. Armed Forces Salary structure

Military salary consists of 3 main components: Base pay (Core Pay plus Trade Supplement Pay (for ORs only)), X-factor and Bespoke pay spines. Base pay is the standard salary military personnel receive and is paid in accordance with the salary paid to civilians doing jobs with a similar job evaluated weight. The X-factor is an additional percentage added to the base salary of regular Service Personnel (and some Reserve personnel depending on commitment level), reflecting the differences between conditions of service experienced by members of the Armed Forces over a full career and conditions in civilian life.²

Armed Forces personnel can be paid differently depending on their trade or profession. Most personnel are on the Main pay scale. Officers have a single Main pay scale but ORs are split into different supplements on the Main pay scale according to their trade and rank.

Accounting for professional skills and career structures, there are Armed Forces personnel on bespoke pay spines. Whilst they are considered, at various levels, equivalent to their main scale counterparts, with equivalent ranks, they are paid differently in recognition of their specialism.

3. Methodology

Guidance from the Equality and Human Rights Commission (EHRC) suggests an audit should make comparisons on the pay of workers undertaking the same type of work. The EHRC advocates when a pay differential related to gender is less than 3%, no action is necessary³. Where the difference is greater than 3%, there is a need to undertake further analysis and for gender pay differentials exceeding 5%, action is needed to address the issue and close the differential. In this audit, pay differentials which exceed 3% when looking at individual ranks within pay scales will involve further analysis to provide explanations. These will include factors such as TIR and pay supplements within their rank.

A basis for measuring pay inequalities in the Armed Forces requires a comparison of salaries for staff undertaking similar roles. Therefore, we compare the pay of personnel in the same service,

² Salary rates below NATO rank OF-7 are recommended by the Armed Forces Pay Review Body (AFPRB) and approved by the Prime Minister each year. AFPRB reports are published annually by the Office of Manpower Economics and can be found at http://www.ome.uk.com/AFPRB_Reports.aspx.

Salaries for senior military officers (NATO rank OF-7 and above) and Senior Civil Servants are recommended by the Senior Salaries Review Body (SSRB) and approved by the Prime Minister each year. SSRB reports are published annually by the Office of Manpower Economics and can be found at http://www.ome.uk.com/SSRB_Reports.aspx.

³ <https://www.equalityhumanrights.com/en/multipage-guide/equal-pay-audit-step-4-causes-gender-pay-differences>

with the same NATO rank and on the same pay scale. It is anticipated this approach will split the population into groups of people doing broadly equivalent work.

This audit focuses on Officers and ORs on the Main pay scale. FTRS personnel are excluded due to different levels of X-factor applied to their base pay rate according to the different balances of positive and negative factors of Service life which apply to this group. Part-time personnel including Volunteer Reservist personnel are excluded due to data quality issues.

4. NATO Rank codes and UK Service ranks

NATO Code	Royal Navy	Royal Marines	Army	Royal Air Force
Officers				
OF-10	Admiral of the Fleet	-	Field Marshal	Marshal of the RAF
OF-9	Admiral	General	General	Air Chief Marshal
OF-8	Vice Admiral	Lieutenant General	Lieutenant General	Air Marshal
OF-7	Rear Admiral	Major General	Major General	Air Vice-Marshal
OF-6	Commodore	Brigadier	Brigadier	Air Commodore
OF-5	Captain	Colonel	Colonel	Group Captain
OF-4	Commander	Lieutenant Colonel	Lieutenant Colonel	Wing Commander
OF-3	Lieutenant Commander	Major	Major	Squadron Leader
OF-2	Lieutenant	Captain	Captain	Flight Lieutenant
OF-1	Sub-Lieutenant	Lieutenant/2nd Lieutenant	Lieutenant/2nd Lieutenant	Flying Officer/Pilot Officer
OF(D)	Midshipman	-	Officer Designate	Officer Designate
Other Ranks				
OR-9	Warrant Officer Class 1	Warrant Officer Class 1	Warrant Officer Class 1	Warrant Officer
OR-8	Warrant Officer Class 2	Warrant Officer Class 2	Warrant Officer Class 2	-
OR-7	Chief Petty Officer	Colour Sergeant	Staff Sergeant	Flight Sergeant/ Chief Technician
OR-6	Petty Officer	Sergeant	Sergeant	Sergeant
OR-4	Leading Rate	Corporal	Corporal	Corporal
OR-3	-	Lance Corporal	Lance Corporal	Lance Corporal
OR-2	Able Rating	Marine	Private (Classes 1 to 3)	Junior Technician/ Leading Aircraftman/ Senior Aircraftman
OR-1	-	-	Private (Class 4)/Junior	Aircraftman

5. Links to relevant MOD statistical publications

UK Defence Statistics (compendium publication containing a wide range of statistics)

<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>
[Annual Manning Report \(Analysis by rank and age\)](#)

Quarterly Service personnel statistics

<https://www.gov.uk/government/collections/quarterly-service-personnel-statistics-index>