

UK Armed Forces Equal Pay Audit 2020/21

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Key Findings

Gender

- Focusing on gender, the evidence shows there are a few differences exceeding 3% between the average salaries for male and female personnel in the Regular Armed Forces, accounting for rank and pay scale. However, once Time in Rank (TIR) is accounted for, observed notable differentials in the average salaries for male and female personnel decrease in all instances and, in all cases bar one, differences are below the 5% threshold for action.
- The outlying case shows a difference of 10.8% for OR-2s in the Royal Air Force (RAF) on Supplement 3, which drops to 6.0% after accounting for TIR. Upon further breakdown, only one of the differentials in individual trades surpassed the 5% threshold at this rank, and further investigation suggests that this is a temporary statistical anomaly which we will keep under review.

Ethnicity

- For ethnicity, there are also pay differentials exceeding 3% for the average salaries of white and ethnic minority personnel when rank and pay scale are considered. Again, once TIR is accounted for, the observed notable differentials in the average salaries for white and ethnic minority personnel decrease in all but one case where it stays the same. In all cases, differences are below 5% threshold for action.

Introduction

The Equal Pay Audit (EPA) assesses the equality of pay for all Regular Service Personnel and Gurkhas 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, which the EHRC recommends for any differentials exceeding 3% and action needed for any above 5%, 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 increment for their rank. In this report we refer to any difference above 3% or 5% as notable.

Analysis produced in this report has some exclusions which are explained below. The population used in this report contains only Regular Service Personnel and Gurkhas who have received basic pay and X-Factor as recorded on the JPA system during October 2020. The exclusions applied in the analysis are:

- a) Non-Regular sub-populations such as Full Time Reserves (FTRS) and Volunteer Reserves are excluded.
- b) Bespoke pay spines, targeting specific specialist groups, and Other Ranks serving in the single trade allocated to Supplement 4 (Army Air Corps Pilots), 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 1 November 2020 (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 5 or fewer personnel have their headcounts and average salaries suppressed and subsequently no pay differential is calculated. Headcount figures have been rounded to the nearest 10 in Tables with Rank breakdowns (figures ending in 5 have been rounded to the nearest 20 to avoid the systematic bias of always rounding upwards).

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 fifth 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 have 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 2020/21 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 percentage difference in salaries of female to males and ethnic minorities to white.

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

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

Ethnic minority 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 (the date the individual commenced working at their latest rank) and the 1st November 2020.

Pay supplements are a key feature of the current pay structure for those in the Other Ranks. Whilst rank remains the key determinant of pay, each of the single Service trades have been allocated to one of 4 Supplement groups primarily based upon Job Evaluation (JE) evidence. Those in trades allocated to Supplement 4 have the highest JE scores and so receive more pay than those in Supplement 3. Similarly, those paid from Supplement 3 receives more than those in Supplement 2, and those in Supplement 1 are paid the least.

Symbols and conventions

Symbols

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

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.

Section 1 - Analysis on average annual basic salary by gender

1.1 Summary

Women represent 10% of the overall UK Regular and Gurkha Armed Forces on the Main Pay Scale. Across the individual services, the proportion of women in the RN and Army are broadly similar with 9.4% and 8.6% respectively, the RAF has the highest proportion of women at 13.9%. There has been a slight increase in these figures since the last publication.

Overall, there is little difference between male and female basic average salary with males paid 0.5% more on average. The RN is the only service which has a pay differential greater than 3% between males and females, with females paid 5.3% less on average. There has been a 0.8 percentage point decrease in this differential since the previous edition of this Audit, where females in the RN were paid 6.1% less on average.¹ Similarly, the RAF differential has fallen by 0.6 percentage points whilst the Army has increased by 0.6 percentage points. However, with the inclusion of Gurkhas this year's differential for Army is 0.3 percentage points lower than last year's.

Table 1: UK Regular and Gurkha Personnel and their average salaries by service and gender as at 1 Oct 20

	Headcount	Proportion	Average Basic Salary	Basic Salary Difference
All Service	137,410		£35,817	0.50%
Male	123,740	90.00%	£35,833	
Female	13,680	10.00%	£35,671	
Royal Navy	30,300		£37,038	5.30%
Male	27,470	90.60%	£37,223	
Female	2,840	9.40%	£35,248	
Army	76,820		£34,631	-0.40%
Male	70,200	91.40%	£34,620	
Female	6,620	8.60%	£34,751	
Royal Air Force	30,290		£37,601	0.60%
Male	26,060	86.10%	£37,634	
Female	4,220	13.90%	£37,397	

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.

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

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 here, reflect the variations present in the distributions for men and women across the Armed Forces without accounting for differences across 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.

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 8.9%, the Army and RAF have differentials of 6.7% and 5.4% 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 Royal Navy OFs, where there has been a 1.3 percentage point decrease in the difference in favour of females.

Table 2: UK Regular and Gurkha personnel on the main pay scale average salaries by gender and Service as at 1 Oct 20

Officers	Headcount	Proportion	Average Basic Salary	Basic Salary Difference
All Service	22,960		£55,586	6.80%
Male	20,080	87.40%	£56,065	
Female	2,880	12.60%	£52,246	
Royal Navy	5,820		£56,294	8.90%
Male	5,210	89.50%	£56,824	
Female	610	10.50%	£51,778	
Army	10,640		£55,539	6.70%
Male	9,500	89.20%	£55,940	
Female	1,140	10.80%	£52,210	
Royal Air Force	6,500		£55,029	5.40%
Male	5,370	82.70%	£55,551	
Female	1,130	17.3%	£52,537	

Other Ranks	Headcount	Proportion	Average Basic Salary	Basic Salary Difference
All Service	114,190		£31,818	2.10%
Male	103,430	90.60%	£31,880	
Female	10,760	9.40%	£31,217	
Royal Navy	24,390		£32,386	5.90%
Male	22,190	91.00%	£32,560	
Female	2,200	9.00%	£30,631	
Army	66,080		£31,247	0.50%
Male	60,610	91.70%	£31,260	
Female	5,470	8.30%	£31,098	
Royal Air Force	23,710		£32,824	3.40%
Male	20,630	87.00%	£32,969	
Female	3,080	13.00%	£31,848	

1.3 Officers

Table 3: UK Regular and Gurkha Officers on the main pay scale average salaries by gender, rank and Service as at 1 Oct 20

Rank	Gender	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff F/M	Army Headcount	Army Ave. Salary	Army % diff F/M	RAF Headcount	RAF Ave. Salary	RAF % diff F/M
Officers		5,820	£56,294		10,640	£55,539		6,500	£55,029	
OF-6	Male	90	£110,385		140	£110,946	0.60%	70	£110,639	
	Female	~			10	£110,253		~		
OF-5	Male	240	£94,133	1.80%	430	£94,844	0.80%	240	£95,380	1.30%
	Female	10	£92,409		30	£94,108		30	£94,139	
OF-4	Male	850	£80,881	2.10%	1,390	£80,333	0.80%	770	£81,972	1.90%
	Female	60	£79,204		120	£79,674		140	£80,383	
OF-3	Male	1,440	£59,921	1.90%	3,350	£59,668	0.30%	1,240	£59,083	1.30%
	Female	170	£58,807		390	£59,474		310	£58,299	
OF-2	Male	1,650	£46,566	-0.50%	2,130	£44,897	-0.40%	2,140	£46,576	0.20%
	Female	230	£46,795		320	£45,072		400	£46,472	
OF-1	Male	740	£35,555	0.00%	1,500	£34,626	-0.10%	810	£35,025	2.20%
	Female	110	£35,570		190	£34,674		200	£34,264	
OF(D)	Male	200	£27,818	0.00%	550	£27,958	-0.60%	100	£27,854	1.10%
	Female	20	£27,818		90	£28,126		40	£27,538	

From Table 3, there are slight pay differentials seen across the services and ranks, however there are no differentials exceeding 3%.

There is a low number of females at OF-6 level in the RN and RAF 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.

1.4 Other Ranks (ORs) – Supplements

1.4a ORs- Supplement 1

Table 4: UK Regular and Gurkha Other Ranks (Supplement 1) average salaries by gender, rank and Service as at 1 Oct 20

Rank	Gender	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff F/M	Army Headco unt	Army Ave. Salary	Army % diff F/M	RAF Headco unt	RAF Ave. Salary	RAF % diff F/M
Other Ranks		3,110	£31,619		19,220	£31,288		7,070	£31,356	
OR-9	Male	60	£51,822	-0.10%	340	£51,320	0.30%	220	£51,791	0.50%
	Female	10	£51,885		60	£51,170		50	£51,532	
OR-8	Male	10	£45,740		880	£45,129	0.40%			
	Female	~			190	£44,967				
OR-7	Male	250	£43,262	1.00%	1,320	£41,379	-0.60%	340	£42,259	0.50%
	Female	60	£42,845		230	£41,617		120	£42,032	
OR-6	Male	370	£38,816	1.00%	1,980	£37,872	-0.60%	840	£38,370	-0.80%
	Female	140	£38,422		330	£38,102		350	£38,675	
OR-4	Male	650	£33,693	1.20%	3,300	£33,466	0.00%	1,480	£33,485	0.20%
	Female	260	£33,281		600	£33,451		500	£33,414	
OR-3	Male	60	£29,580	0.90%	3,090	£29,458	0.40%			
	Female	30	£29,313		660	£29,337				
OR-2	Male	780	£23,087	1.00%	5,110	£22,450	1.00%	2,290	£24,322	1.60%
	Female	440	£22,856		1,130	£22,226		700	£23,922	
OR-1	Male							140	£20,514	-2.60%
	Female							40	£21,056	

Table 4 shows the pay differentials in the ORs for those on Supplement 1. Similar to the OFs there are only slight pay differentials seen with no differential exceeding the 3% mark.

1.4b ORs- Supplement 2

Table 5: UK Regular and Gurkha ORs (Supplement 2) average salaries by gender, rank and Service as at 1 Oct 20

Rank	Gender	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff F/M	Army Headco unt	Army Ave. Salary	Army % diff F/M	RAF Headco unt	RAF Ave. Salary	RAF % diff F/M
Other Ranks		9,660	£30,976		34,400	£30,232		9,720	£32,422	
OR-9	Male	240	£51,934	0.30%	310	£51,082	-0.30%	230	£51,546	-0.50%
	Female	10	£51,798		20	£51,227		10	£51,804	
OR-8	Male	150	£47,442		1,290	£46,880	0.30%			
	Female				40	£46,738				
OR-7	Male	790	£44,122	0.10%	2,010	£42,846	-0.40%	690	£44,074	1.70%
	Female	40	£44,091		60	£43,035		60	£43,327	
OR-6	Male	1,260	£39,571	1.30%	3,470	£39,030	-0.30%	1,590	£40,094	0.80%
	Female	90	£39,066		110	£39,139		160	£39,754	
OR-4	Male	1,960	£34,207	0.50%	6,180	£34,189	0.40%	2,370	£34,784	1.20%
	Female	160	£34,032		120	£34,049		200	£34,374	
OR-3	Male	540	£29,690		6,570	£29,991	-0.30%	180	£29,722	
	Female				180	£30,071				
OR-2	Male	4,150	£22,791	1.20%	13,660	£22,424	3.30%	3,220	£25,922	5.40%
	Female	270	£22,526		380	£21,685		280	£24,528	
OR-1	Male							680	£20,185	-0.30%
	Female							60	£20,245	

1.4bi Gender pay differentials at OR-2 Supplement 2

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

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 is 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 6 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.

1.4bii Adjusting for TIR in the Army OR-2 - Supplement 2

Table 6: Comparison of average salaries of UK Regular and Gurkha OR-2s in the Army before/after accounting for TIR as at 1 Oct 20

Rank	Gender	Headcount	Ave. Salary	% diff F/M	Adjusted Ave. Salary	% diff F/M
OR-2	Male	13,660	£22,424	3.30%	£22,405	0.30%
	Female	380	£21,685		£22,333	

Accounting for TIR, the pay differential between females and males for OR-2s in the Army drops from 3.3% to 0.3%, below the 3% threshold. This is consistent with equality of pay once TIR has been accounted for.

A decrease in the pay differential after adjusting for TIR implies that males have a higher TIR on average than females at this rank.

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

Table 7: Comparison of average salaries of UK Regular OR-2s (Supplement 2) in the RAF before/after accounting for TIR as at 1 Oct 20

Rank	Gender	Headcount	Ave. Salary	% diff F/M	Adjusted Ave. Salary	% diff F/M
OR-2	Male	3,220	£25,922	5.40%	£25,903	4.40%
	Female	280	£24,528		£24,750	

Once the TIR is accounted for, the pay differential between females and males has decreased from 5.4% to 4.4%, which does not take the differential below the 3% threshold, but below the threshold for action of 5%.

1.4c Other Ranks (ORs)- Supplement 3

Table 8: UK Regular and Gurkha ORs (Supplement 3) average salaries by gender, rank and Service as at 1 Oct 20

Rank	Gender	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff F/M	Army Headcount	Army Ave. Salary	Army % diff F/M	RAF Headcount	RAF Ave. Salary	RAF % diff F/M
Other Ranks		11,620	£33,763		12,460	£33,984		6,920	£34,886	
OR-9	Male	560	£52,102	0.50%	490	£51,178	0.30%	190	£51,648	0.80%
	Female	10	£51,867		40	£51,007		20	£51,220	
OR-8	Male	110	£49,489		1,050	£48,707	-0.20%			
	Female				90	£48,789				
OR-7	Male	1,500	£46,815	1.00%	1,430	£44,651	-0.30%	870	£46,114	1.90%
	Female	80	£46,330		110	£44,772		60	£45,239	
OR-6	Male	1,820	£40,695	0.90%	1,290	£40,031	-0.10%	1,350	£41,041	0.60%
	Female	100	£40,336		140	£40,061		120	£40,797	
OR-4	Male	2,790	£34,792	-0.30%	1,700	£34,749	-0.30%	1,460	£35,318	0.30%
	Female	210	£34,896		280	£34,849		110	£35,212	
OR-3	Male	110	£30,876		1,800	£30,506	0.90%			
	Female				280	£30,236				
OR-2	Male	4,030	£22,493	0.20%	3,350	£22,106	2.80%	2,120	£27,615	10.80%
	Female	300	£22,440		420	£21,491		210	£24,639	
OR-1	Male							370	£20,395	1.00%
	Female							40	£20,200	

1.4ci Gender pay differentials at OR-2

In Table 8, there is a pay differential between males and females exceeding the 3% mark for the RAF at OR-2 suggestive of male and female personnel receiving different average salaries at the same rank.

As with the previous supplements, TIR is not available so has been estimated in further analysis.

1.4cii Adjusting for TIR in the RAF OR-2 – Supplement 3

Table 9: Comparison of average salaries of UK Regular ORs (OR-2) in the RAF before/after accounting for TIR as at 1 Oct 20

Rank	Gender	Headcount	Ave. Salary	% diff F/M	Adjusted Ave. Salary	% diff F/M
OR-2	Male	2,120	£27,615	10.80%	£27,505	6.40%
	Female	210	£24,639		£25,741	

By accounting for TIR, the pay differential remains notable with a decrease between males and females from 10.8% to 6.4%, which is still above the 5% threshold for action. Similar to the previous audit, this does not show equality of pay once TIR has been accounted for within the RAF OR-2 Supplement 3.

1.4ciii Further analysis on RAF OR-2 – Supplement 3

Adjusting for TIR showed a differential higher than the 5% threshold for action. However, upon further breakdown by trade, it has been found that one unadjusted salary differential was above 5% at 6.4%. All other unadjusted salary differentials are under 5% for each individual trade. The reasons for this outlying salary differential has been investigated further by the relevant RAF workforce planning team. It appears that a large, mainly male, annual intake into this relatively small trade a few years previous, and their subsequent yearly incremental progression through the pay spine, has served to skew the figures and create what we believe to be a temporary anomaly. This area will be kept under review as part of future annual Equal Pay Audits.

Section 2 – Analysis on average annual basic salary by ethnicity

2.1 Summary

Ethnic minorities comprise 9.2% of the UK Regular Armed Forces personnel on the Main Pay Scale which is a 0.8 percentage point increase from last year's publication. With the inclusion of Gurkhas in this year's edition, ethnic minorities now comprise 11.6% of the UK Regular and Gurkha Armed Forces personnel. The RN and RAF have similar proportions of ethnic minority personnel with 4.8% and 2.9% respectively, the Army has the largest proportion of ethnic minority personnel at 17.7%.

Across all services, the pay differential between white and ethnic minority personnel is 16.2% which exceeds the 3% threshold. These pay differentials are present in all the individual services with the RN having the largest difference of 17.7%. A positive pay differential implies ethnic minority personnel receive a lower salary than white personnel, before taking account of differences between ranks.

Table 10: UK Regular and Gurkha Personnel and their average salaries by service and ethnicity as at 1 Oct 20

	Headcount	Proportion	Average Basic Salary	Basic Salary Difference*
All	137,410		£35,817	
White	120,620	88.40%	£36,454	16.20%
Ethnic Minority	15,900	11.60%	£30,551	
Unknown	900		£43,483	
Royal Navy	30,300		£37,038	
White	28,670	95.20%	£37,377	17.70%
Ethnic Minority	1,440	4.80%	£30,755	

Unknown	190		£33,525	
Army	76,820		£34,631	
White	63,060	82.30%	£35,542	14.40%
Ethnic Minority	13,600	17.70%	£30,441	
Unknown	160		£32,045	
Royal Air Force	30,290		£37,601	
White	28,880	97.10%	£37,529	14.90%
Ethnic Minority	870	2.90%	£31,941	
Unknown	540		£50,495	

*Unknown ethnicity is not included in the calculation

2.2 Comparison of average salaries

From Table 11 below, we can look at the pay differentials between white and ethnic minority personnel for Officers and ORs subgroups for each service.

There are notable pay differentials for white and ethnic minority Officers which exceeds the 3% threshold. A positive pay differential implies white Officers and ORs receive a higher average salary than ethnic minority Officers and ORs. After breaking down to individual services, the Army Officers is the area with the smallest pay differential at 4%, which is less than the 5% mark. The figures have all risen compared to the previous edition, with the largest increase found in Army ORs which has increased by 3.6 percentage points.

Table 11: UK Regular and Gurkha personnel average salaries by ethnicity and service as at 1 Oct 20

Officers	Headcount	Proportion	Average Basic Salary	Basic Salary Difference*
All	22,960		£55,586	
White	22,130	97.40%	£55,574	7.40%
Ethnic Minority	600	2.60%	£51,462	
Unknown	230		£67,630	
Royal Navy	5,820		£56,294	
White	5,690	98.10%	£56,350	6.20%
Ethnic Minority	110	1.90%	£52,866	

Unknown	20		£59,554	
Army	10,640		£55,539	
White	10,290	96.90%	£55,574	4.00%
Ethnic Minority	330	3.10%	£53,344	
Unknown	20		£72,267	
Royal Air Force	6,500		£55,029	
White	6,150	97.50%	£54,854	15.10%
Ethnic Minority	160	2.50%	£46,587	
Unknown	190		£67,816	

*Unknown ethnicity is not included in the calculation

Other Ranks	Headcount	Proportion	Average Basic Salary	Basic Salary Difference*
All	114,190		£31,818	
White	98,230	86.50%	£32,121	7.50%
Ethnic Minority	15,290	13.50%	£29,725	
Unknown	660		£35,144	
Royal Navy	24,390		£32,386	
White	22,890	94.50%	£32,598	11.30%
Ethnic Minority	1,320	5.50%	£28,923	
Unknown	180		£30,839	
Army	66,080		£31,247	
White	52,680	79.90%	£31,609	5.50%
Ethnic Minority	13,260	20.10%	£29,866	
Unknown	140		£25,769	
Royal Air Force	23,710		£32,824	
White	22,660	97.00%	£32,828	13.00%
Ethnic Minority	700	3.00%	£28,572	
Unknown	350		£41,091	

*Unknown ethnicity is not included in the calculation

2.3 Officers

Table 12: UK Regular and Gurkha Officers average salaries by ethnicity, rank and service as at 1 Oct 20

Rank	Ethnicity	Royal Navy			Army			RAF		RAF % diff
		Headcount	Ave. Salary	RN % diff Ethnic minority/ White	Headcount	Ave. Salary	Army % diff Ethnic minority/ White	Headcount	Ave. Salary	Ethnic minority/ White
Officers		5,820	£56,294		10,640	£55,539		6,500	£55,029	
OF-6	White	90	£110,398		150	£110,931		80	£110,696	
	Unknown							~		
	Ethnic Minority	~			~			~		
OF-5	White	250	£94,045		450	£94,799	0.00%	250	£95,346	
	Unknown	~			~			20	£94,261	
	Ethnic Minority	~			10	£94,814		~		
OF-4	White	900	£80,790	1.30%	1,470	£80,299	1.50%	850	£81,824	-0.60%
	Unknown	~			10	£81,338		50	£79,931	
	Ethnic Minority	10	£79,743		30	£79,055		10	£82,305	
OF-3	White	1,570	£59,801	-0.30%	3,600	£59,614	-1.50%	1,450	£58,811	-0.40%
	Unknown	10	£59,309		10	£59,605		80	£61,110	
	Ethnic Minority	30	£59,993		140	£60,494		20	£59,042	
OF-2	White	1,820	£46,618	1.70%	2,370	£44,920	0.00%	2,450	£46,558	1.70%
	Unknown	~			~			40	£48,036	
	Ethnic Minority	50	£45,812		70	£44,923		60	£45,759	
OF-1	White	840	£35,552	-0.80%	1,640	£34,630	-0.10%	950	£34,898	1.80%
	Unknown							~		
	Ethnic Minority	10	£35,845		60	£34,681		60	£34,267	
OF(D)	White	220	£27,818		620	£27,960	-2.20%	130	£27,818	3.30%
	Ethnic Minority	~			20	£28,565		10	£26,891	

2.3ai Ethnicity pay differentials at OF(D)

From Table 12, there are pay differentials present for OF(D)s in the RAF which has a 3.3% differential. A negative pay differential implies ethnic minority personnel are paid more than white personnel.

2.3aii Adjusting for TIR in the RAF OF(D)

Table 13: Comparison of average salaries of UK Regular Officers (OF(D)) in the RAF before/after accounting for TIR as at 1 oct 20

Rank	Ethnicity	Headcount	Ave.	% diff	Adjusted	% diff
			Salary	F/M	Ave. Salary	F/M
OF(D)	White	130	£27,818	3.30%	£27,818	3.30%

The exclusion of TIR, results in no change to the absolute pay differential between ethnic minority and white personnel staying at 3.3%, which is still above the 3% level suggesting that TIR has no impact on the pay differential here. This does not show equality of pay once TIR has been accounted for.

2.4 Other Ranks – Supplements

2.4a ORs- Supplement 1

Table 14: UK Regular and Gurkha ORs (Supplement 1) average salaries by ethnicity, rank and service as at 1 Oct 20

Rank	Ethnicity	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff Ethnic minority/ White	Army Headcount	Army Ave. Salary	Army % diff Ethnic minority/ White	RAF Headcount	RAF Ave. Salary	RAF % diff Ethnic minority/ White
Other Ranks		3,110	£31,619		19,220	£31,288		7,070	£31,356	
OR-9	White	70	£51,844		380	£51,300	0.10%	260	£51,750	0.40%
	Unknown							~		
	Ethnic Minority	~			20	£51,237		10	£51,554	
OR-8	White	10	£45,574		910	£45,160	0.90%			
	Ethnic Minority				160	£44,767				
OR-7	White	300	£43,190	0.90%	1,140	£41,479	0.60%	440	£42,183	0.20%
	Unknown				~			20	£42,720	
	Ethnic Minority	10	£42,807		410	£41,235		10	£42,098	
OR-6	White	470	£38,704	0.00%	1,570	£38,022	1.00%	1,130	£38,472	1.60%
	Unknown	~			~			30	£38,659	
	Ethnic Minority	40	£38,691		730	£37,657		30	£37,848	
OR-4	White	780	£33,571	-0.10%	2,610	£33,467	0.00%	1,910	£33,455	0.30%
	Unknown	~			~			20	£35,505	
	Ethnic Minority	120	£33,612		1,290	£33,457		50	£33,348	
OR-3	White	90	£29,514		2,570	£29,400	-0.40%			
	Unknown	~			10	£28,599				
	Ethnic Minority				1,170	£29,524				
OR-2	White	940	£23,333	6.20%	3,990	£22,515	1.10%	2,810	£24,295	4.80%
	Unknown	10	£22,170		60	£20,960		10	£24,739	
	Ethnic Minority	270	£21,879		2,180	£22,260		170	£23,127	
OR-1	White							170	£20,689	2.90%
	Ethnic Minority							10	£20,085	

2.4ai Ethnicity pay differentials at OR-2

In the above table there are two notable pay differentials exceeding the 3% threshold which are the OR-2s in the RN and in the RAF, with a difference of 6.2% and 4.8% respectively, indicative of white personnel receiving a higher average salary than ethnic minority personnel. The presence of sufficient pay differentials warrants further investigation which considers the effect of TIR.

2.4aⁱⁱ Adjusting for TIR in the RN OR-2 – Supplement 1

Table 15: Comparison of average salaries of UK Regular ORs (OR-2) in the RN before/after accounting for TIR as at 1 Oct 20

Rank	Ethnicity	Headcount	Ave.	% diff	Adjusted	% diff
			Salary	F/M	Salary	F/M
OR-2	White	940	£23,333	6.20%	£23,170	3.10%

Once TIR is accounted for, the absolute pay differential between ethnic minority and white OR-2s in the RN reduces from 6.2% to 3.1%, which is still above the 3% threshold. This does not show equality of pay once TIR has been accounted for.

2.4aⁱⁱⁱ Adjusting for TIR in the RAF OR-2 – Supplement 1

Table 16: Comparison of average salaries of UK Regular ORs (OR-2) in the RAF before/after accounting for TIR as at 1 Oct 20

Rank	Ethnicity	Headcount	Ave.	% diff	Adjusted	% diff
			Salary	F/M	Salary	F/M
OR-2	White	2,810	£24,295	4.80%	£24,244	1.20%

With TIR adjusted for, the absolute pay differential between ethnic minority and White personnel decreased from 4.8% to 1.2%. This demonstrates equality of pay once TIR has been accounted for.

2.4b ORs- Supplement 2

Table 17: UK Regular and Gurkha ORs (Supplement 2) average salaries by ethnicity, rank and service as at 1 Oct 20

Rank	Ethnicity	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff Ethnic minority/ White	Army Headcount	Army Ave. Salary	Army % diff Ethnic minority/ White	RAF Headcount	RAF Ave. Salary	RAF % diff Ethnic minority/ White
Other Ranks		9,660	£30,976		34,400	£30,232		9,720	£32,422	
OR-9	White	250	£51,934		320	£51,090	0.00%	220	£51,547	
	Unknown				~			10	£51,730	
	Ethnic Minority	~			10	£51,101		~		
OR-8	White	140	£47,451		1,230	£46,892	0.50%			
	Unknown	~			~					
	Ethnic Minority	~			90	£46,674				
OR-7	White	810	£44,120	0.00%	1,830	£42,858	0.10%	710	£44,031	
	Unknown	10	£44,183					30	£43,596	
	Ethnic Minority	10	£44,141		240	£42,805		~		
OR-6	White	1,270	£39,576	2.50%	3,080	£39,048	0.30%	1,660	£40,041	1.40%
	Unknown	20	£39,651		~			70	£40,803	
	Ethnic Minority	60	£38,592		500	£38,944		20	£39,498	
OR-4	White	1,990	£34,186	-0.10%	5,150	£34,145	-0.70%	2,500	£34,735	-0.60%
	Unknown	20	£34,660		~			20	£36,182	
	Ethnic Minority	110	£34,236		1,150	£34,370		40	£34,960	
OR-3	White	520	£29,673	-1.20%	5,570	£29,909	-1.60%	180	£29,694	-2.50%
	Unknown	~			~					
	Ethnic Minority	20	£30,041		1,170	£30,396		10	£30,429	
OR-2	White	4,120	£22,789	0.40%	11,260	£22,418	0.30%	3,350	£25,830	2.60%
	Unknown	40	£21,669		30	£21,691		10	£28,536	
	Ethnic Minority	270	£22,704		2,760	£22,350		130	£25,167	
OR-1	White							700	£20,178	-1.10%
	Ethnic Minority							40	£20,400	

From table 17, there are slight pay differentials seen across the services and ranks, however there are no differentials exceeding 3%.

2.4c ORs- Supplement 3

Table 18: UK Regular and Gurkha ORs (Supplement 3) average salaries by ethnicity, rank and Service as at 1 Oct 20

Rank	Ethnicity	Royal Navy Headcount	Royal Navy Ave. Salary	RN % diff Ethnic minority/ White	Army Headcount	Army Ave. Salary	Army % diff Ethnic minority/ White	RAF Headcount	RAF Ave. Salary	RAF % diff Ethnic minority/ White
Other Ranks		11,620	£33,763		12,460	£33,984		6,920	£34,886	
OR-9	White	560	£52,100		510	£51,169	0.20%	200	£51,622	
	Unknown	~			~			10	£51,367	
	Ethnic Minority	~			20	£51,074		~		
OR-8	White	110	£49,497		1,030	£48,721	0.10%			
	Unknown				~					
	Ethnic Minority	~			110	£48,649				
OR-7	White	1,530	£46,822	2.50%	1,330	£44,683	0.40%	870	£46,060	-0.20%
	Unknown	~			~			40	£45,990	
	Ethnic Minority	50	£45,669		200	£44,501		10	£46,162	
OR-6	White	1,860	£40,679	0.20%	1,290	£40,008	-0.70%	1,390	£40,977	-1.90%
	Unknown	10	£40,513		~			60	£41,896	
	Ethnic Minority	60	£40,606		140	£40,276		20	£41,770	
OR-4	White	2,870	£34,786	-1.20%	1,770	£34,730	-0.90%	1,520	£35,298	0.90%
	Unknown	20	£34,584		~			20	£36,952	
	Ethnic Minority	110	£35,195		200	£35,033		30	£34,971	
OR-3	White	110	£30,867		1,850	£30,427	-1.20%			
	Ethnic Minority	~			230	£30,806				
OR-2	White	4,110	£22,528	2.20%	3,300	£22,006	-1.20%	2,250	£27,365	2.20%
	Unknown	30	£20,354		~			~		
	Ethnic Minority	190	£22,026		470	£22,268		80	£26,758	
OR-1	White							390	£20,386	0.80%
	Unknown							~		
	Ethnic Minority							20	£20,216	

From table 18, there are slight pay differentials seen across the services and ranks, however there are no differentials exceeding 3%. Therefore, there is no need for further analysis.

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 10.8% for the RAF at OR-2 within Supplement 3. However, this drops to 6.4% after accounting for TIR. Further analysis shows that the unadjusted salary differentials for the individual trades on that rank are below the 5% threshold with the exception of one trade who's differential was found to be 6.4%.

Personnel can increment in pay spines as their time in rank increases so long as they are not already at the top increment of the spine for their rank. 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, one pay differential is below the 3% threshold and all differentials bar one are below 5%, although further investigation suggests that this is a temporary statistical anomaly which we will keep under review. Only two differentials above 3% are present after TIR adjustment alone, the OR-2 on Supplement 2 and 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 ethnic minority personnel in the Armed Forces. Consistent with observations for gender, these differentials were found at the lower ranks and the largest difference was 6.2% for the RN OR-2 on Supplement 1. After the adjustment for TIR, this differential dropped to 3.1%, still above the 3% threshold and in favour of White personnel.

This analysis suggests that once service, rank, and TIR are accounted for there is equality of basic pay for Regulars on the main pay scale irrespective of ethnicity or gender in all but three cases. In addition, for these three cases it can be shown through further analysis that the underlying differential are also below the 5% threshold where, based on guidance from the Equality and Human Rights Commission (ECHR), action to close the differential might be required.

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. If the person does not have an intake date or has not been promoted since 2007, then their length of service has been taken as the difference between their entry date and the situation date of publication. 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

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 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 and can be found at http://www.ome.uk.com/SSRB_Reports.aspx.

a pay differential related to gender is less than 3%, no action is necessary.³ 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, 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.

In this year's edition of the audit, Gurkha personnel have been included in the population of scope of UK Regular personnel for this analysis. Although all members of the Gurkha Brigade are Male and of Ethnic Minority, they work as Regular personnel and have been included as part of the UK Regular Army to accurately show the representation of gender and ethnicity across the whole of the Armed Forces. Whilst there were some minor changes to overall differences following inclusion of Gurkhas, as would be expected, it has not caused any change in the groups with differences exceeding either the 3% or 5% thresholds

4. NATO Rank codes and UK Service ranks

Officers

NATO Code	Royal Navy	Royal Marines	Army	Royal Air Force
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

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

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

NATO Code	Royal Navy	Royal Marines	Army	Royal Air Force
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 1	Warrant Officer Class 1	-
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 \(compendium publication containing a wide range of statistics\)](#)

[Quarterly Service Personnel Statistics](#)

[Bi-annual Diversity Statistics](#)