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Colette Ferebee Armed Forces Pensions Team Ministry of Defence

By email only to: <u>People-AFRem-AFPSPol2@mod.uk</u>

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Dear Colette

## Actuarial factors for Armed Forces pension arrangements Early and Late Retirement

- Further to my letter of 21 May and Alan's letter of 7 April setting out our proposed general approach to factor reviews, this letter sets out our advice on early and late retirement factors for eligible members of AFPS 15, AFPS 05 and AFPS 75, together with revised tables of factors. The factors may also be used for early retirement cases in RFPS and FTRS.
- General early and late retirement factors are assumed to be "MoD-controlled" factors and so it is MoD's decision whether to update these factors after considering GAD's recommendation (although please see the "Armed Forces pensions regulations" section of this letter). It is up to MoD to determine when the updated factors should be distributed to and implemented by the administrators.
- 3. These factors should not be used to adjust pension debits or credits, or to adjust Annual Allowance offsets. We will write separately regarding these adjustments.
- 4. The letter is not appropriate for any other purpose. No third party (eg scheme members) is entitled to rely on it and GAD has no liability to any third party for any act or omission taken on the basis of this letter.
- 5. GAD seeks to achieve a high standard in all our work. Please go to our website for details of the standards we apply.

## Background

- 6. Early retirement refers to the option of early payment of benefits with actuarial reduction. Deferred benefits are payable without reduction from age 65 for AFPS 05 and SPA (or age 65 if later) for AFPS 15, but members can draw these benefits at any age from age 55 with actuarial reduction to allow for the early payment. However, pensions payable on a member's death to their spouse, partner or dependant are not reduced.
- 7. AFPS 75 deferred pensioners with pre- and post-April 2006 service may have benefits payable from age 60 and 65 respectively. They have the option to bring age 65 benefits into payment early subject to actuarial reduction.
- 8. AFPS 15 also allows for enhancement of pensions which are paid later than the earliest age at which they are payable without reduction. If the member is in service for the

period over which the pension is delayed then an "in-service late payment supplement" is paid. If the member is not in service for the period over which the payment is delayed then a "late payment supplement" applies.

- These factors should be used for members who were <u>not</u> in service over the period of delay and who are therefore entitled to a late payment supplement. We will write separately regarding the in-service late payment supplement.
- 10. Pension credits and debits may also be adjusted if they come into payment earlier or later than assumed. However, the early and late retirement factors provided in this letter should <u>not</u> be used for such circumstances. There are separate adjustment factors provided specifically for adjusting pension credits and debits. There are also separate adjustment factors provided for adjusting Annual Allowance offsets.
- 11. The existing early retirement factors were issued in December 2011 following the introduction of the new SCAPE discount rate in the March 2011 Budget.
- 12. The review is being conducted in light of the actuarial valuation of the Armed Forces pension arrangements carried out as at 31 March 2012 which was completed on 24 February 2015.

## **Armed Forces pensions regulations**

- 13. Rule 44 of SI 2014 No.2336 of the Armed Forces Pension Regulations 2014 which came into force on 1 April 2015, sets out the eligibility criteria and restrictions on the early payment of pensions with actuarial reduction. The "early payment reduction" is defined in rule 3 as "the actuarial reduction that is applied when calculating the annual rate of pension payable to a member of this scheme who has not reached their normal pension age and applies to receive their pension before their deferred pension age."
- 14. The AFPS15 "late payment supplement" is defined in rule 3 as "an additional amount of pension that the scheme manager determines to be appropriate, after consulting the scheme actuary, because (a) an active member leaves service at or after normal pension age but delays receipt of their pension; or (b) a deferred member or a pension credit member delays receipt of their pension beyond their deferred pension age."
- 15. Rule D.4 of SI 2005 No.438 the Armed Forces Pension Scheme Order 2005 (as amended), which came into force on 6 April 2005, sets out the eligibility criteria and restrictions on the early payment of pensions with actuarial reduction for Officers and Other Ranks. The reference in RFPS regulations is similar.
- 16. Rule D.4(4) of the regulations states that: "The amount of the annual pension to which the member becomes entitled is first calculated as mentioned in rule D.2(3) or rule D.3(5) and then that amount is reduced by such amount as the Secretary of State determines after consulting the Scheme actuary."
- 17. Rule D.17(1) of the Armed Forces Pension Scheme 1975 and Attributable Benefits Scheme (Amendment) Order 2010 states that "A member who is entitled to a further pension under rule D.11(2)(b) may opt, before reaching the age of 60, to receive the pension from the age of 60 at an actuarially reduced rate."
- 18. For some of the clauses above, it is not clear whether the actuarial reduction is under the control of MoD or the actuary. For the purpose of this letter we have assumed that all the actuarial reductions and enhancements covered in this advice are under MoD's control

on actuarial advice. However if you are uncertain about the meaning of the regulations we suggest you seek legal advice.

- 19. There are no references in the regulations as to how these early and late retirement factors should be derived or how regularly they should be reviewed.
- 20. The existing tables of early retirement factors were determined in terms of actuarial equivalence to the benefits paid on normal retirement, on assumptions consistent with those used to set employer contributions to the scheme under the SCAPE methodology.
- 21. As set out in Alan's letter of 7 April 2015 and agreed with John McCullagh, the factors set out in this letter follow this principle.

## Key actuarial assumptions used to determine the new factors

- 22. The major assumptions to consider for the early and late retirement factors are the discount rate and the mortality assumptions.
- 23. Appendix A summarises the main assumptions used for calculating the new early and late retirement factors.

#### **Discount rate**

- 24. We have adopted the same long-term SCAPE discount rate as used to determine employer contributions to AFPS in the 2012 valuation. This can be considered to represent the cost to the scheme of providing the benefits otherwise payable.
- 25. The long-term SCAPE discount rate used in the 2012 valuation was 3% pa in excess of assumed CPI, which is unchanged since the last factor review.

#### **Mortality Assumptions**

- 26. Suitable data is not available in respect of members who have taken the early retirement option to allow us to determine whether the mortality experience of such members differs from the mortality experience of scheme members in normal health. Early retirement factors are not applied to deferred members with permanent serious ill health (eg see AFPS 05 Rule D.7).
- 27. However, assumed mortality rates will only have a small impact as both the normal retirement pension given up and the early or late retirement pension awarded are paid until death and depend on assumed mortality in a similar manner. As a result, we do not propose to carry out more detailed consideration of the mortality assumption.
- 28. The existing factors use the "PA92" standard tables adjusted to reflect the available experience for the mortality of AFPS pensioners. Future improvements in post-retirement mortality were based on those underlying the ONS 2008-based principal population projections for the UK.
- 29. For the revised factors we have used the assumptions adopted for the 2012 actuarial valuation for post-retirement mortality which were based on the "S1" standard tables adjusted to reflect the latest available experience for the mortality of AFPS pensioners. Officer mortality of 88% of S1NXA has been used on the assumption that officers are more likely to take early retirement however, using Other Ranks mortality would not materially change the factors.

30. Future improvements in post-retirement mortality are based on those underlying the ONS 2012-based principal population projections for the UK.

## Other considerations

- 31. In the previous review of early retirement factors, a single set of factors was used for all ranks of members and for men and women. We are not aware of any relevant changes in circumstances and so we have prepared the new factors using the same approach. The factors are similar across all ranks so this administrative simplification does not make a significant difference to the outcomes for members.
- 32. The new factors have been calculated individually for males and females and then combined into unisex factors using a proportioning of 90% males to 10% females, consistent with the profile of the armed forces as at 31 March 2012.
- 33. The current factors are based on a deferred pension age (DPA) of 65. However, in AFPS 15 the DPA will be age SPA (or age 65 if later) and so the relevant DPA can currently vary from 65 to 68 depending on the scheme and the member. After consultation with MoD, we have revised the method of calculating the early retirement factors so that we can use one table for calculating factors for each possible DPA instead of having separate tables for each DPA.
- 34. To calculate a reduction or increase to pension, the factor at early/late retirement age should be divided by the factor at the default pension age. This is then multiplied by the unadjusted pension to calculate the adjusted pension.
- 35. The pension factors can also be used for the adjustment to Added Pension which is made when a member leaves with only a deferred pension entitlement (i.e. no EDP entitlement). In such cases, the factor at the member's DPA should be divided by the factor for Age 60 years and 0 months and the result should be multiplied by the Added Pension amount.
- 36. Please note that the lump sum adjustment table and method will not change from the current method since there are no lump sum adjustments in AFPS15 and we therefore do not need to apply the new table format and method.
- 37. The revised factors are in some cases slightly more generous and in others less generous than the existing factors. This is due to the change in mortality assumptions affecting different ages to different extents. We would expect the revised factors to be broadly cost-neutral to the scheme by reference to the assumptions used to determine employer contributions under the SCAPE methodology.

## **Revised factors**

38. Appendix B sets out revised factors for early and late retirement in AFPS 15 and AFPS 05. These also apply for early payment of age 65 benefits in AFPS 75. These are based on the assumptions set out in Appendix A. The factors may also be used for early retirement cases in RFPS and FTRS.

39. An illustration of how the factors are used is given below:

A member leaves AFPS 15 at age 35 with a pension of  $\pounds$ 3,000 pa. This is payable from age 66, his SPA. He elects to take early payment of pension with actuarial reduction at age 55. His pension that is paid to him at age 55 is then:

Pension =  $3,000 \times 1.80 \times 0.415/0.764$  = £2,933 pa

(where 1.80 is an illustrative Pensions Increase over the period from leaving the scheme until age 55)

40. We would expect these factors to remain appropriate while the current SCAPE discount rate remains in force and while mortality rates remain broadly in line with the assumptions. However, as set out in our Service Level Agreement, we will keep these factors under review in accordance with our statutory responsibilities under the regulations and advise you if and when we believe a further review is necessary. Please let us know if there are any relevant changes in regulations or circumstances which might affect our consideration of these factors.

### Next steps

- 41. For AFPS 05, these factors are under MoD's control after taking actuarial advice. We have assumed that the same is true for AFPS 75 and AFPS 15 (but this is not clear from the regulations and if unsure we suggest you seek legal advice). If you are content with the revised factors (and underlying assumptions) in this letter then you will need to decide on the effective date for implementing them (you may wish to consult DBS and/or AFPS's legal advisers first). Alternatively if you have any comments please let us know.
- 42. We will also shortly provide an updated version of our factors spreadsheet which includes the revised early and late retirement factors. We note that you may also wish to review any relevant guidance.

Yours sincerely

Joanne Rigby Consulting Actuary

# APPENDIX A

# Summary of assumptions for AFPS early and late retirement factors

Table A1 – F	Financial	assumptions
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Assumption	Rate	Notes
Discount rate (in excess of CPI inflation)	3.00%	In line with long term SCAPE rate

# Table A2 – Demographic assumptions

Assumption	Notes
Post-retirement mortality	
Base mortality	"S1" tables issued by the Actuarial Profession. Mortality of 88% of S1NXA based on the 2012 valuation mortality for officers
Future mortality improvements	ONS 2012-based principal population projections for the UK, consistent with approach adopted for actuarial valuations and Annual Accounts
Other	
Proportion of male members	90%
Proportion of female members	10%

## **APPENDIX B**

# General Early and Late Retirement Factors in AFPS 75, 05 and 15 and Added Pension Adjustment Factors in AFPS 15

## **Adjustment to Pension**

The following factors are used for adjustments to pension in AFPS 75, 05 and 15. The factors are unisex. Please see the notes beneath the tables.

Age at Early/I ate Petirement - Adjustment to Pension - Unisey (AEPS75, 05 and 15)											
	Aye	at Earry/Ea	le Relifeit	ieni - Auju	sument to i		JIIISEX (AF	F 37 3, 03 a	inu 15)		
	55	56	57	58	59	60	61	62	63	64	
months											
0	.415	.437	.460	.484	.510	.539	.569	.602	.638	.676	
1	.417	.439	.462	.486	.513	.541	.572	.605	.641	.680	
2	.419	.440	.464	.488	.515	.544	.575	.608	.644	.683	
3	.421	.442	.466	.491	.517	.546	.577	.611	.647	.687	
4	.422	.444	.468	.493	.520	.549	.580	.614	.651	.690	
5	.424	.446	.470	.495	.522	.551	.583	.617	.654	.694	
6	.426	.448	.472	.497	.525	.554	.586	.620	.657	.697	
7	.428	.450	.474	.499	.527	.557	.588	.623	.660	.701	
8	.430	.452	.476	.502	.529	.559	.591	.626	.664	.704	
9	.431	.454	.478	.504	.532	.562	.594	.629	.667	.708	
10	.433	.456	.480	.506	.534	.564	.597	.632	.670	.711	
11	.435	.458	.482	.508	.536	.567	.599	.635	.673	.715	
Note: To o	btain the	factor to c	alculate th	ne reduced	/increased	pension	upon early	/late payn	nent at ag	e Y,	

divide the factor at age Y by the factor at the Normal Pension Age

Age at Early/Late Retirement - Adjustment to Pension - Unisex (AFPS75, 05 and 15)												
	65	66	67	68	69	70	71	72	73	74	75	
months												
0	.718	.764	.815	.870	.932	1.000	1.076	1.160	1.254	1.360	1.478	
1	.722	.769	.819	.875	.938	1.006	1.083	1.168	1.263	1.370		
2	.726	.773	.824	.881	.943	1.013	1.090	1.176	1.272	1.380		
3	.730	.777	.829	.886	.949	1.019	1.097	1.184	1.281	1.389		
4	.734	.781	.833	.891	.955	1.025	1.104	1.192	1.290	1.399		
5	.738	.785	.838	.896	.960	1.032	1.111	1.199	1.298	1.409		
6	.741	.790	.843	.901	.966	1.038	1.118	1.207	1.307	1.419		
7	.745	.794	.847	.906	.972	1.044	1.125	1.215	1.316	1.429		
8	.749	.798	.852	.911	.977	1.051	1.132	1.223	1.325	1.439		
9	.753	.802	.856	.916	.983	1.057	1.139	1.231	1.334	1.449		
10	.757	.806	.861	.922	.989	1.063	1.146	1.239	1.342	1.459		
11	.761	.811	.866	.927	.994	1.069	1.153	1.246	1.351	1.468		
Note: To d	obtain the	factor to c	alculate th	ne reduced	/increased	pension	upon early	/late payr	nent at ag	e Y, divide	the	

factor at age Y by the factor at the Normal Pension Age

#### Notes

- 1. Ages are given in years and complete months. Part months are ignored.
- 2. To calculate a reduction/increase to pension, divide the factor at early/late retirement age by the factor at the default pension age. This is then multiplied by the unadjusted pension to calculate the adjusted pension.

- 3. These factors are not applicable for the uplift required to pensions that come into late payment when an active member leaves service after NPA 60 (such factors are being provided separately). They are applicable for the cases:
  - where a member leaves service at NPA 60 and delays receipt of their pension;
  - where a deferred member delays receiving their pension beyond their Deferred Pension Age ("DPA"). To calculate the LRF, their default pension age will, for this purpose, be their DPA; and
  - where an active member, who has served beyond NPA 60, then delays taking their pension immediately on exit. To calculate the LRF, their default pension age will, for this purpose, be the age at which they left service.
  - to adjust Added Pension as in point 4 below.
- 4. To adjust the Added Pension upon a member leaving service with only entitlement to deferred benefits (no EDP entitlement), divide the factor at the member's DPA by the factor for Age 60 years and 0 months and multiply the result by the Added Pension amount.
- 5. Pensions payable to a member's spouse, civil partner, other adult dependant and/or eligible children should not be reduced/increased.
- 6. Before using the factors, the member's pension should have the relevant increases applied from the date of leaving the scheme until the date of early/late retirement.
- 7. These factors should not be used for adjusting pension debits or credits or for Scheme Pays adjustments.

## Adjustment to Lump Sum

Age at Early Retirement - Adjustment to Lump Sum - Unisex (AFPS75 and 05 only)										
	55	56	57	58	59	60	61	62	63	64
months										
0	.748	.769	.792	.815	.839	.864	.889	.916	.943	.971
1	.749	.771	.794	.817	.841	.866	.892	.918	.945	.973
2	.751	.773	.796	.819	.843	.868	.894	.920	.948	.976
3	.753	.775	.798	.821	.845	.870	.896	.922	.950	.978
4	.755	.777	.800	.823	.847	.872	.898	.925	.952	.981
5	.757	.779	.802	.825	.849	.874	.900	.927	.955	.983
6	.759	.781	.804	.827	.851	.877	.902	.929	.957	.985
7	.760	.783	.806	.829	.854	.879	.905	.932	.959	.988
8	.762	.784	.807	.831	.856	.881	.907	.934	.962	.990
9	.764	.786	.809	.833	.858	.883	.909	.936	.964	.993
10	.766	.788	.811	.835	.860	.885	.911	.938	.966	.995
11	.768	.790	.813	.837	.862	.887	.913	.941	.969	.998

The following factors are used for adjustments to lump sums in AFPS 75 and 05. The factors are unisex.

#### Notes

- 1. Ages are given in years and complete months. Part months are ignored.
- 2. On early retirement, the members' lump sum should be multiplied by the relevant factor.
- 3. The lump sum should be increased from the date of leaving the scheme until the date of early retirement in line with the Pension Increase Act before applying the factor.
- 4. These factors should not be used for adjusting pension debits or credits or for Scheme Pays adjustments.