Report on the Actuarial Valuation as at 31 December 2020 British Aerospace Senior Staff Association Superannuation Fund

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Introduction

This report is addressed to Unite the Union (the Union) and sets out the results of my actuarial valuation of the British Aerospace Senior Staff Association Superannuation Fund (the Fund) as at 31 December 2020. The previous valuation was carried out with an effective date of 31 December 2015.

This report satisfies Section 40 of the Trade Union and Labour Relations (Consolidation) Act 1992 (the Act) which requires that the Union should arrange for the Fund to be examined periodically by an appropriately qualified actuary, and for a report to be made to the Union by the actuary on the result of the examination. The main requirements of the Act are summarised on page 3.

Readers other than the Union should note that this report cannot be relied upon as being actuarial advice to third parties and third parties should seek their own independent advice as appropriate.

A copy of this report should be provided to the Certification Officer by 31 December 2021.



Overview of the valuation

I have carried out an actuarial valuation of the Fund as at 31 December 2020. In doing so, I have valued the Fund's liabilities on both an ongoing basis and a winding-up basis. The previous actuarial valuation was carried out with an effective date of 31 December 2015.

I have used the following data and information for the valuation:

- the Fund's benefit structure, a summary of which is given in Appendix A;
- membership data as at 31 December 2020 supplied by Louanne Muhammad at the Union, a summary of which is given in Appendix B; and
- asset information as at 31 December 2020 supplied by Louanne Muhammad, a summary of which is given in Appendix C.

The Fund is governed by the Trade Union and Labour Relations (Consolidation) Act 1992. Section 40 of the Act requires that the Union should arrange for the Fund to be examined periodically by an appropriately qualified actuary and for a report to be made to the Union by the actuary on the result of the examination. The Act also lays down that the examination shall include a valuation of the assets comprised in the fund maintained for the payment of benefits and of the liabilities falling to be discharged out of it.

In addition, the actuary's report shall state whether, in the opinion of the actuary:

- the contribution rates are adequate;
- the accounting or funding arrangements are suitable; and
- the fund for the payment of benefits is adequate

The purpose of the ongoing valuation is to assess the funding position of the Fund on an ongoing basis in accordance with the terms of the Act.

The purpose of the winding-up valuation is to estimate the level of assets needed to distribute the Fund's benefits to members, after allowing for expenses, should the Union ballot its members and were the Fund to wind-up at the valuation date.

For the avoidance of doubt, there are no requirements for the Fund to meet the Statutory Funding Objective as defined in section 222 of the Pensions Act 2004, and I have not assessed the Fund on this basis.



Actuary's opinion

There are some uncertainties around membership data, which are set out in Appendix B. I have considered the sensitivity of the valuation results to using different assumptions and examined the key risks that could impact upon the Union's funding strategy for the Fund.

The next section of this report "Ongoing valuation" sets out the method and assumptions used to value the liabilities, together with a summary of the results, and the sensitivity of those results to the assumptions made.

After considering the results of this valuation, the Union will continue to administer the Fund in accordance with the rules of the Fund.

The next actuarial valuation should be carried out with an effective date such as the Union may determine, not being more than five years after effective date of this valuation i.e. by 31 December 2025.

Given the results shown in the ongoing valuation section of this report, it is my opinion that no further contributions are required from the Union at this time.

It also my opinion that the funding arrangements are suitable and the fund established for the payment of benefits is adequate.



The ongoing valuation

Funding objective

The Union's funding objective is to target, over a period, sufficient assets to cover the liabilities of the Fund on an ongoing basis.

Ongoing valuation results

I set out below my results of the ongoing valuation alongside the results of the previous valuation as at 31 December 2015.

£	31 December 2020	31 December 2015
Assets	1,096,000	800,427
Liabilities	579,000	508,316
Surplus	517,000	292,111
Funding level	189%	157%

The Fund had a significant surplus at the 31 December 2020.

The Union is not currently making any contributions to the Fund and is meeting the cost of all expenses related to the Fund directly.

Valuation method

The valuation of the liabilities requires a number of assumptions to be made about the future.

In this valuation, I have used a market-related approach. Assets are valued at their market value and the financial assumptions used in valuing the liabilities use gilt market conditions as at the valuation date.

The expected benefit payments from the Fund in respect of eligible members were estimated and the value of the liabilities is determined by discounting these estimated benefit payments from the payment date to the valuation date using the assumptions outlined in Appendix D.

I have then compared the value of the liabilities with the market value of the Fund's assets to determine if there is a surplus or a shortfall in the assets.

Valuation assumptions

Financial assumptions

I have calculated the results of the valuation using market related assumptions. Details of the assumptions used are in Appendix D.

The majority of the assets are invested in equities. However, for prudence, and given the short duration of the Fund's liabilities, I have estimated the investment return (discount rate) using the yields available on government bonds (gilts). The assumption I have adopted is derived from the Bank of England nominal gilt yield curve using cashflows that broadly replicate the profile of the Fund.

Members' benefits revalue on 1 January each year in line with the increase in the Retail Prices Index (RPI) inflation over the previous 12 months. For the purposes of this valuation I have derived an RPI assumption from the Bank of England's implied RPI inflation curves determined from government bonds, taking account of the duration of the liabilities and implied approximate shape of future cash flows.



As most benefit payments from the Fund are assumed to take place immediately at the effective date of the valuation, the liabilities are not very sensitive to the discount rate and RPI inflation assumptions adopted. This is illustrated in the sensitivities shown opposite on this page.

Other assumptions

I understand that members do not receive any benefits on death. For prudence, I have assumed there will be no deaths before vesting.

I have made no allowance for expenses in this valuation and assume that all expenses will be met directly by the Union. I understand that the cost of administration of benefit payments has been met by the Union in the past and that this will continue in the future. Any specific audit charges and the fees for actuarial valuations are assumed to be met by the Union as they fall due.

Data uncertainties

I have some concerns about the reliability of the data, details of which are given in Appendix B. For the purposes of this valuation, I have taken a prudent view where the data is unreliable. Given the ongoing funding level of 189%, I consider that these uncertainties will not impact my opinion given on page 4.

Sensitivity of results to assumptions used

The results of a valuation depend on the assumptions used. The assumptions represent one estimate of possible future experience. The final cost of the Fund will be determined by actual experience such as the performance of the Fund's investments.

I set out below the approximate change in the assets and liabilities for various changes in key assumptions:

Change in ongoing basis as at 31 December 2020	Change in ongoing surplus
Discount rate 0.4% pa lower (i.e. a discount rate of 0.0% pa)	£0
Inflation 1% pa higher	(£1,000)
Assets fall by 10%	(£110,000)

The table on the previous page shows that the results are not very sensitive to the financial assumptions adopted. For this valuation, as I have assumed that most benefits are payable immediately, the estimated benefit payments have not been discounted to the valuation date for most members.

The valuation results are much more sensitive to the investment performance of the assets, which are predominantly held as equities. A 10% fall in the asset value at the valuation date would result in the surplus falling to £384,000, and the ongoing funding level would fall from 189% to 170%.

Given that equities are typically volatile, a 10% fall in value of assets would not be impossible event. For example, at the start of the COVID-19 pandemic the value of equities fell by around 30%, recovering to pre-pandemic levels in late 2020.



The winding-up valuation

The ongoing valuation sets a funding target that is appropriate for a fund that is not in the process of winding up.

For the winding-up valuation, I have considered what the situation would be if the Fund had commenced winding up at the valuation date.

For the purpose of the winding-up valuation, I have assumed that the lump-sum payment would be paid immediately to all members on the valuation date.

In assessing the winding-up position, I have assumed that the benefits are paid immediately. Therefore, no future revaluation or discounting has been applied.

I have also assumed additional wind-up expenses of £20,000 to cover administrative, actuarial and any legal expenses required in distributing the lump sum payments.

My estimate of the value of the liabilities on these assumptions can therefore only be taken as a guide to the actual cost at the valuation date.

Summary of results

I set out below the results of my winding-up valuation, together with the corresponding results from the last valuation.

	31 Dec 2020	31 Dec 2015
Assets	1,096,000	800,427
Liabilities	576,000	505,772
Winding-up expenses	20,000	10,000
Total Liabilities	596,000	515,772
Surplus	500,000	284,655
Funding level	184%	155%

Details of all the assumptions used are given in Appendix D.

Significance of the winding-up valuation

The size of any surplus in the winding-up valuation result helps to illustrate the level of security of members' benefits. It also indicates the maximum exposure of the Union as at the valuation date.

At the valuation date, I estimate the Fund had sufficient assets to wind-up and distribute all benefits to the members such that the current membership would receive 100% of their benefit entitlement payable on the valuation date.



Valuation development

Change in funding position

To understand the valuation results, it is helpful to consider how the funding position of the Fund has developed since the last valuation and how it may be expected to develop over the period to the next valuation.

I have provided a broad analysis below of the change in the position of the Fund over the period since the previous valuation.

Factor	£'000s	Notes
Surplus at 31 December 2015	292	
Effect of interest on the surplus	52	
Expected surplus at 31 December 2020	344	
Investment return better than expected	268	Invested assets achieved an average return of 6% pa compared the assumed rate of 1.4% pa
Members retiring later than expected	(59)	
Inflation higher than expected	(1)	For those members under age 65, the average rate of revaluation was 2.6% pa, compared with the rate assumed at the last valuation of 2.3% pa.
Other less significant factors	(1)	
Surplus at 31 December 2020 on old assumptions	521	
Changes in method and assumptions	(4)	A lower discount rate and a higher assumption for future RPI indexation results in slightly higher liabilities
Surplus at 31 December 2020 on new assumptions	517	



Projection to the next valuation

The next full actuarial valuation should be carried out with an effective date such as the Union may determine, not being more than five years after the effective date of this valuation, i.e. by 31 December 2025.

The results of that valuation will depend on the experience of the Fund between 31 December 2020 and the date of the next valuation. Assuming the experience is in line with the assumptions adopted for the ongoing valuation, I would anticipate the funding position of the Fund at the date of next valuation on the ongoing basis to be similar or better to the funding position at 31 December 2020.

If assumptions underlying the ongoing valuation are borne out in practice then I would expect the winding-up position of the Fund to be similar or better to the winding-up position of the Fund at 31 December 2020.

Risks and uncertainty

Given that:

- the ongoing funding level of 189% and the winding-up assessment of 184%; and
- the prudent assumption that benefits for all members are payable immediately, with no allowance for any members to die before receiving their lump sum; and
- the prudent assumption that all members are still entitled to their benefits,

there does not appear to be any significant risks that may affect the financial position of the Fund.

However, the assets of the Fund are predominantly held as equities, whereas the liabilities have been assessed using the expected return on short-dated government bonds. The sensitivities on page 6 showed that a 10% fall in the value of the assets at the valuation date would result in a fall in the ongoing surplus of around £106,000, and a fall in the ongoing funding level from 189% to 170%. The Union may wish to consider taking advice on this mismatch of the assets and the liabilities.



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Appendix A: Benefit structure

The main provisions of the Fund, on which the valuation is based, are set out in Clause 9 of Schedule 1 of the Proposed Transfer of Engagements of the British Aerospace Senior Staff Association (BAeSSA) to the Amalgamated Engineering and Electrical Union (AEEU) with effect from 1 October 2000. The main provisions are as follows:

- A lump sum of £226.42 for each complete year of qualifying membership of the Fund is paid to members retiring on or after 1 September 1998.
- Benefits may be paid to the member other than at retirement as determined by the Union.
- Benefits increase prior to vesting on 1 January each year, in line with the increase in the Retail Prices Index since 1 January 2000.
- No benefit is paid on death either before or after vesting.

Member contributions

I have not been provided with details of any member contributions to the Fund.



Appendix B: Membership data

The membership data has been provided by Louanne Muhammed at Unite the Union.

I have carried out a number of high-level checks on the membership data and I have some concerns about the reliability of the data, as set out below.

Uncertainties with the data

Due to the uncertainty in the data provided, a number of assumptions have been required in preparing the valuation data.

For some members, no date of birth has been provided. The average age of the remaining membership is 77, with some members aged over 100. I have assumed that all members aged 65 or over, or for whom the date of birth is unknown, will draw their benefits immediately at the valuation date. This approach is consistent with that used at previous valuations.

The data provided by the Union suggests that no members have claimed their benefits or passed away before claiming benefits since 31 December 2015. Given there are some members over age 100, the latter seems unlikely. It is therefore likely that there are some members within the data that have no further claim to any benefits. However, on grounds of prudence, I have included all members included in the data in the valuation of the liabilities.

The Union should carry out existence verification checks on the membership, to ensure that the members are aware of the benefit to which they are entitled, and to close off the records for any deceased former members who no longer hold any entitlement.

Summary of data used

The following membership data was used in carrying out the valuation. The membership data is recorded at 31 December 2020 and no allowance has been made for any movements that may have occurred since that date.

Other than lists of members present at the current and previous valuations, I have not been provided with any further details of member movements over the period.

	31 December 2020	31 December 2015	
Number of members	137	137	
Average age (unweighted)	76.6	71.6	
Total lump sum benefit payable as at valuation date	£570,000	£502,000	



Appendix C: Asset data

The assets of the Fund are held with Unite the Union Trustee Company Ltd and are segregated from the assets of Unite the Union.

The asset information was provided by Louanne Muhammad at Unite the Union.

The unaudited market value of assets of the Fund for the year ended 31 December 2020 was £1,096,000.





Appendix D: Assumptions

The methods and assumptions adopted for the ongoing valuation and the winding-up valuation as at 31 December 2020 are set out below. For comparative purposes, I have also shown the assumptions adopted at 31 December 2015 valuation.

	Ongoing valuation 31 December 2020	Ongoing valuation 31 December 2015	Winding up valuation 31 December 2020	Winding up valuation 31 December 2015	
Method					
Assets	Market value				
Liabilities	Projected unit method				
Assumptions					
Discount rate	0.4% pa	1.4% pa	n/a		
Future revaluation	3.3% pa	2.3% pa	n/a		
Age at retirement	65 ¹ 65 ²		5 ²		
Mortality	No allowance				
Withdrawals	No allowance				
Expenses	Paid by the Union				
Wind-up expenses	n/a £20,000 £10,000			£10,000	

Notes

¹⁻ For the ongoing valuation as at 31 December 2020 it has been assumed that benefits for members aged over 65, or for whom dates of birth are unknown, are vested immediately.

² For the winding-up valuation as at 31 December 2020 it has been assumed that the Fund would be wound-up immediately and benefits paid to members as an immediate lump sum payment.



Appendix E: Compliance

Actuarial standards

The following Technical Actuarial Standards apply to this work:

- TAS 100: Principles for Technical Actuarial Work
- TAS 300: Pensions

I confirm I have complied with their requirements.

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