



Ministry
of Defence

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██████████
E-mail address: ██████████

24 May 2017

Dear ██████████,

Thank you for your email of 9 May in which you requested the following information:

"I am trying to find out where I could find any studies regarding the decibel levels and noise made from the FV433 Abbot SPG and the FV432 Armored Personnel Carrier (APC)."

I am treating your correspondence as a request for information under the Freedom of Information Act (FOIA) 2000.

A search for the information has now been completed within the Ministry of Defence, and I can confirm that some of the information in scope of your request is held and is attached. Both attachments relate to the noise generated by the vehicles, not the level experienced by the crew if wearing the correct hearing protection, which were issued and should have been worn.

The first attachment relates to the AFV 432. Some of the information contained in this has been withheld under section 40 of the FOIA – personal information – as it contains the names of individuals. Section 40 is an absolute exemption under the Act and does not require a public interest test to establish if the information should be released.

The second set of data relates to the BULLDOG vehicles. There is a clear differentiation between the current in service BULLDOG family of vehicles and the FV432 APC. FV432 APC was upgraded to BULLDOG in the mid 2000's with a new engine group and steering system and improvements were made to the running gear. This means that a direct comparison between noise data cannot be made between the FV 432 and the BULLDOG since the noise generating components differ significantly between the platforms, despite them being based around the same hull.

Information on AFV 433 (which went out of service over 20 years ago) is likely to have either been archived (unknown where) or left on previous MoD MIS that no longer exists. I should advise that such historical documents could be held in general files in MOD archive and would be impossible to find, or we would expect to have been destroyed under policies in place at the time. It would, therefore, be an unfair burden and a disproportionate effort on the Department to find them. However, under Section 16 of the FOIA – advice and assistance - the FV433 (ABBOT) had the same base as the FV432 but had an artillery gun fitted to it. This should mean that the 1970's data for road and cross country running is likely to be very similar for both 432 and 433 but without the noise of the gun firing.

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

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

Yours sincerely,


Disclosure and Litigation Leader

Bulldog

Figures below are worst case unprotected noise levels.

N/R denotes that no figure is available, grey fields indicates position not applicable or tested for platform.

Variant	Data Supplied By	Report Year	Hatches	Terrain	Driver		Commander		3rd Man/Crew 1		Crew 2		Crew 3/ stretcher	
					Noise dB(A)	Noise dB(C)	Noise dB(A)	Noise dB(C)	Noise dB(A)	Noise dB(C)	Noise dB(A)	Noise dB(C)	Noise dB(A)	Noise dB(C)
Bulldog 2	NAVED	2016	Open	Road	105.70	N/R	105.60	N/R	104.70	N/R	108.00	N/R	110.60	N/R
				Cross country	92.80	N/R	94.00	N/R	91.20	N/R	94.40	N/R	97.30	N/R
			Closed	Cross country	88.10	N/R	92.60	N/R	87.00	N/R	88.20	N/R	91.50	N/R
Bulldog 2 TES	NAVED	2016	Open	Road	110.00	124.50	108.10	122.50	100.40	117.60	101.30	125.60	100.60	124.90
				Cross country	99.10	121.40	97.40	120.90	90.70	117.10	90.80	124.20	90.80	117.50
				Gravel	99.60	113.40	99.20	113.40	95.40	118.20	96.20	125.00	95.50	122.80
Bulldog 2 Command	NAVED	2016	Open	Road	102.27	116.72	98.05	114.85	96.09	113.48	96.38	115.09	95.62	118.04
				Cross country	88.59	112.58	83.84	104.42	83.85	106.58	84.95	106.58	81.49	106.45
				Gravel	98.93	117.42	88.39	103.36	93.35	113.36	94.17	113.03	92.31	116.80
Bulldog 4	NAVED	2017	Open	Road	101.30	113.10	98.40	114.90	102.60	124.78	103.79	121.47		
				Cross country	100.65	120.50	94.14	107.61	95.26	111.88	95.84	111.58		
				Gravel	105.77	118.33	95.14	110.78	98.66	119.88	100.14	119.81		
Bulldog Ambulance	NAVED	2017	Open	Road	106.80	129.70	98.10	122.00	109.00	134.60			103.20	131.10
				Cross country	102.90	126.10	92.90	114.30	103.10	126.90			93.90	126.40
				Gravel	106.30	127.90	96.60	118.00	108.00	136.40			99.80	126.40

FOI REQUEST 5342 NOISE LEVELS FOR FV 432 & FV433

FV 432

Data taken from the following report

A Survey of the noise generated by Weapons, Vehicles and other equipment used by the Army (In relation to criteria for safe exposure), dated Sept 1970 by [REDACTED], [REDACTED], RAMC and [REDACTED].

Table 3

Limiting Times for daily steady-state noise exposure

Vehicle	Level of Ear Protection		
	Unprotected	Sonex Plug	Fluid Seal Muff
FV 432 Road Running	15-30mins	1-2 hrs	More than 8 Hours
FV 432 Cross Country	1 Hr	4Hr	More than 8 hours