



HEADQUARTERS AIR COMMAND
RAF Business Secretariat 3

Spitfire Block
Royal Air Force
High Wycombe
Buckinghamshire
HP14 4UE

Ms Berenice John
By Email

Our Ref:
06-03-2009-130812-008

30 March 2009

Dear Ms John

Thank you for your email of 4 March 2009. I am replying as this is an area for which I have responsibility. You requested information on whether MOD hold documentation which clarifies 'chemtrails' and whether the MOD undertake spraying of chemicals into the atmosphere from military aircraft. This has been considered as a request for information in accordance with the Freedom of Information Act 2000 (FOIA).

I have been unable to locate any information which clarifies 'Chemtrails'. I am also unable to locate any information that confirms that aircraft are carrying or releasing any noxious airborne chemicals into the atmosphere. It is certainly the case that our military aircraft have neither been tasked to, nor possess any equipment that enables them to release chemicals deliberately into the atmosphere that might create 'chemtrails'. The exception being the Red Arrows who release coloured smoke, purely for visual effect, whilst completing Air Displays.

I am able to advise that contrails are water vapour condensation trails which are sometimes produced by civil and military aircraft engine exhaust when at higher altitudes. The main products of fuel combustion are carbon dioxide and water vapour. At high altitudes water vapour emerges into a cold environment. The vapour then condenses into millions of tiny water droplets or ice crystals which form the vapour trail or contrail. These occur especially when there is a combination of high humidity and low temperatures. If a contrail is formed in air that is already saturated with water vapour it will then persist and appear to grow – in some circumstances numbers of separate contrails may merge to produce a thin cloud or overcast.

We are not aware of any concerns raised by the scientific community about the potential effects of contrails from aircraft. There is no credible evidence that they are intentional or that they are contaminated other than by aircraft exhaust gases and particulates which consist mostly of water and Carbon Dioxide. You may be interested to know that the Department for Transport has sponsored research in contrails and their effect on the environment. A major international scientific meeting in 2006 (see <http://www.pa.op.dlr.de/tac/>) which presented significant new research on the subject. Their main conclusion was that "The elemental composition [of jet exhaust vapours] indicates that these particles are mainly composed of carbon, with a few oxygen and traces of sulphur".



INVESTORS IN PEOPLE



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 Head of Corporate Information, 6th Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-XD@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, <http://www.ico.gov.uk>.

I hope that this information is useful

Yours sincerely

[signed]

RAF Bus Sec 3

The Constitution Unit, a research body at University College London, is carrying out an independent evaluative study of the Freedom of Information Act 2000 in co-operation with a number of public authorities, including the Ministry of Defence. An important part of the evaluation process is gathering the experiences and opinions of FOI requesters like you. Any information you provide will only be seen by the Constitution Unit and will be handled in accordance with its privacy policy explained in the survey. The Ministry of Defence will only see the published results: no individual responses will be visible to us and your participation will have no effect on your future dealings with the Ministry.

If you would like to take part in this study, please visit the following link to be taken directly to the survey: <http://tinyurl.com/6prff8>. Or, if you prefer, contact Ben Worthy at b.worthy@ucl.ac.uk or on 020 7679 4974 to ask more about the study.

If you have filled this survey out before, we invite you to fill it out again in light of the recent response to your request.



INVESTORS IN PEOPLE

