11/19/72

Dear Mr. Clapp,

At the suggestion of the American Public Health Association I have obtained and read "Health Effects of Community Noise", from the co-author, John R. Goldsmith, M.D.,, head of the Environmental Epidemiology Unit of the Bureau of Occupational Health and Environmental Epidemiology of the California State Department of Public Health. Without suggesting that one swallow makes the spring, what follows is quotations from this paper that I think have some relevance in our case. I am aware that all of this is beyond your experience from the things you have said and written. I intend these excerpts only as a suggestion to you that there is what you have not experienced and that what we have experienced is not entirely unknown to science.

To the degree it is within our financial capability, I willx obtain the source material cited. We are now more than usually limited this way. I will make a special note of one of the cited sources, probably two of them, I am uncertain about the second.

Separate from sonic boom, under "Review of Previous Studies", four "effects" are noted. Of these the first is "psychological". (p.2)

From p. 3:"...it is apparent that noise can be very irritating and can impair health and social performance. For example, it can impair communication, can interfere with sleep and because of the lack of rest, it can effect social adaptation. The British report[7] in 1963 says: 'for the most part, people's well-being is diminished by noise, so in this sense of the term there is no doubt that noise effects health." #7 and probably [24], cited later, are the two official studies from which my wife was excerpting what I had marked for Peter Taft that very frightening night in February 64 during which I could not get into bed and preceeding the morning she collapsed at Group Health, when the initial diagnosis was of a stroke. (I do not quote from this section, for it would be too extensive, but there are xxxxx repeated references to and even charts of such associations. I have been aware of Mr. Rosen s work on this aspect for almost a decade.) This is the medical report I know is missing from GHA files. We still have what my wife typed from these reports and Taft s files should hold the ribbon copy. I borrwed the reports from the British Library of Information. There is reference to the examination th report on which is missing in the GHA files you have. Further quotation from the British official study (on p. 4),"The general effect of npise on health must therefore be more psychological than physical". (In this connection a note from p. 19 one reference to xxxxxxxx a third British study, which reports on admissions to mental hospitals of people near London's Heathrow airport,"Admissionx rates for the 1966-1968 period , studied retrospectively, were significantly higher in the 'exposed' than in the control area." Lancet 12/13/69.)

From pp. 8-9: "Attributes of noise include such physical xxxx parameters as...information content...abruptness...The effects of a sound on a person is not determined solely by the nature and temporal pattern of the sound, but also by the qualities of the stimulus situation...expetations and previous experience with similar sounds of the individual concerned. Thus the stimuli to which the individual reacts are not necessarily the same as the sound that is emitted froma specific source." I hope you remember enough of what I've told you that you may not have credited to see the parallel. This, which I have just seen for the first time, is exactly what I have told you.

From pp. 9-10: "Multiple reactions are to be expected and interacting effects also may be important. The primary effects are physical effects, possible symptoms or signs of disease, possible impairment of function, or interference with activities....If a person's feelings of annoyance are strong enough they will lead him or her to try to modify the sound environment. The can also lead him to behave in a way which has social effects (i.e., create parent-child tensions...)...impairment of communication..."

From p. 11, relating to what is now called "sociocusis" and to residence near an airport,"...reported to have loss of hearing at high frequencies )2,000 to 6,000 Hz.) Since conventional impairment criteria developed for use in industry do not take high-frequency loss into account, such effects can be all too readily overlooked." Further, "It is expected by analogy with air quality criteria that community populations may

contain groups especially susceptible." The second quotation may relate to either of us or to neither but I believe in different ways to both.

This hearing loss in the normal high frequencies, 2-6000 Hz of cycles) applies to me. ("Human beings, generally, have the ability to hear sounds from 20 to 20,000 cycles per second", p. 6, but don't be mislead: 20,000 cycles is the ability but not the normal capability - it is higher than most people can hear, I'm certain.)

Dr. Zhivko Angeluscheff, a Bulgarian living in New York, expert in many disciplines, which is more common in Europeans, and world-famous as an otologist, told me that he expected the helicopter overflights diminished the range of my hearing. I did not believe it. He also told ~~mx~~ that what I described as my wife's reactions are what he would expect. In any event, I had a hearing test. As of that date, several years ago, my hearing cut off at 3,000 cycles. What this means is that I can't hear such normal and beautiful sounds as the normal high C in music, without the harmonics, all of which are now lost to me. It also limits my comprehension of words at normal or higher than normal volume. When we sit no more than 10 feet from the TV and have it as loud as my wife finds comfortable, I have to ask her to tell me what I miss in normal conversational levels in the audio. This is particularly true of the female voice and is marked on the telephone, where I believe the frequency response is limited. I cannot pinpoint the date when I first became aware of a hearing defect. I can remember the doctor I first consulted. There have been two hearing tests. Both should be in my GHA records and dated. One was at the Washington Hospital Center. I do know this was not always true of me and that no cause has been attributed to it. Throughout our married life we have until recently always had modern and excellent hi-fi equipment. What we now have responds past normal human range in both directions. It is not new but is excellent. I have offered to swap it because we can't either of us enjoy its potential any more. Aside from Angeluscheff's opinion, which has had world-wide acceptance in medical and scientific circles, it seems to me that if this damage occurred after the beginning of the overflights, there is a point and a damage that should be considered. Do you know a quieter place to live than a farm? There was nothing in our normal environment to which this can be attributed, and there has been no medical cause assigned. GHA told me it was not normal degeneration and their records should show it. I don't believe I ever mentioned it to you. But then we never really did go into the medical things. There is a certain degree of discomfort associated with it, worse and more annoying in the past than after adjustment.

I am getting other and official studies. I have a few I have not yet had a chance to read, from EPA and from the World Health Organization. What I have told you is new to you only. It is not new to those to whom I've spoken in ecological groups or EPA. If I did not send you the medical report on Mrs. Maxwell, it is not new to her doctor or her psychiatrist ("...severe psychoneurosis related to noise..."), who evaluated what it had done to her as,"I now consider her to be dangerously depressed; I must emphasize '<u>dangerously depressed</u>.'" The noise to which she was subjected had a level well withing what is allowable under workmen's compensation law. Nor is such conditioning in itself new. I remember cases from World War II, one in particular, a soldier who had had no unusual exposure to noise, but he was so conditioned to aviation that he flipped is he so much as hear a plane. I was with him at Camp Shanks, N.Y., beginning New Year's Eve 1943. He was then so conditioned he really went crazy when he heard a plane, even in the distance.

Sincerely,

Harold Weisberg