From: Officer in Charge, Naval Medical Administrative Unit, Monterey
To: Chairman, Mechanical and Astronautical Engineering Department, Naval Postgraduate School, Monterey, 700 Dyer Road, Monterey CA 93943

Subj: NOISE SURVEY RESULTS, MECHANICAL AND ASTRONAUTICAL ENGINEERING DEPARTMENT, NAVAL POSTGRADUATE SCHOOL, MONTEREY, BUILDING 245, ROOM 138C GAS TURBINE ENGINE TEST CELL

Ref: (a) OPNAVINST 5100.23G, Chapter 18, paragraph 1803.a
     (b) OPNAVINST 5100.23G, Chapter 18, paragraph 1813c(2)
     (c) OPNAVINST 5100.23G, Chapter 18, paragraphs 1808a and b
     (d) OPNAVINST 5100.23G, Chapter 20, paragraphs 2013a and b
     (e) OPNAVINST 5100.23G, Chapter 6, Appendix 6-A
     (f) OPNAVINST 5100.23G, Chapter 18, section 1806
     (g) OPNAVINST 5100.23G, Chapter 18, paragraph 1807a

1. Noise levels inside the Bldg 245, Room 128C Gas Turbine Engine Test Cell were measured by the Naval Medical Administrative Unit, Monterey Industrial Hygienist on 22 February 2011.

2. The measured noise levels are as follows:

<table>
<thead>
<tr>
<th>Engine Status</th>
<th>Measured Noise Level, dBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>@-32,000 rpm, highest normal operating speed, inside test cell</td>
<td>114</td>
</tr>
<tr>
<td>@-32,000 rpm, control panel</td>
<td>75</td>
</tr>
</tbody>
</table>

3. The measured noise levels when personnel enter the Engine Test Cell to troubleshoot the instrumentation on the engine or the engine itself during operation exceed the Navy noise criterion level of 84 dBA outlined in reference (a).

4. Based on the measured noise levels and the reported maximum time spent in any one day inside the Test Cell, the calculated 8-hour time weighted average (8-hr TWA) noise exposure can exceed the Navy Noise Occupational Exposure Limit (NOEL) of 84 dBA as also outlined in reference (a).
5. As the result of this noise survey's results, the following requirements need to continue to be complied with for all personnel entering the Test Cell during engine operation:

- inclusion in the NPS Hearing Conservation Program roster per reference (b)

- annual hearing conservation and (initial only) personal protective equipment (PPE) training per references (c), (d), and (e) (by completion of the Enterprise Safety Applications Management System (ESAMS) Hearing Conservation (110) and Personal Protective Equipment (PPE)(1398) Training Modules)

- annual hearing tests (audiograms) per reference (f) (by having the supervisor schedule them with Flora Delapena, Occupational Health Nurse, Presidio of Monterey, Army Medical Clinic, Occupational Health Department at 831-242-4532, e-mail flora.delapena@us.army.mil)

- continued use of both ear plugs and muffs per reference (g) when entering the test cell. Because the measured noise levels outside the test cell do not exceed the Navy noise criterion level of 84 dBA, hearing protection is not required during work performed outside the test cell

6. If further consultation on this report is needed, please contact the NMAU Industrial Hygienist, S. Eric Thurston at 831-656-2477, e-mail setthurst@nps.edu.

S. E. THURSTON
By direction

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