Report SAM-TR-82-2

DI-2-ETHYLHEXYL PHTHALATE RESPIRATOR QUANTITATIVE FIT TEST INSTRUMENT

Edward S. Kolesar, Jr., Captain, USAF
Colette M. de la Barre, Staff Sergeant, USAF

July 1982

Final Report for Period 10 April 1981 - 30 July 1981

Approved for public release; distribution unlimited.

USAF SCHOOL OF AEROSPACE MEDICINE
Aerospace Medical Division (AFSC)
Brooks Air Force Base, Texas 78235

NOTICES

This final report was submitted by personnel of the Crew Environments Branch, Crew Technology Division, USAF School of Aerospace Medicine, Aerospace Medical Division, AFSC, Brooks Air Force Base, Texas, under job order 2729-00-20.

When U.S. Government drawings, specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise, as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

The operational personnel who participated in this study were fully briefed on all procedures prior to participation in the study.

This report has been reviewed by the Office of Public Affairs (PA) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report has been reviewed and is approved for publication.

Edward S. Kolesar, Jr.

EDWARD S. KOLESAR, Jr., Captain, USAF
Project Scientist

RICHARD L. MILLER, Ph.D.
Supervisor

ROY L. DEHART
Colonel, USAF, MC
Commander

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER SAM-TR-82-2	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE *(and Subtitle)* DI-2-ETHYLHEXYL PHTHLATE RESPIRATOR QUANTITATIVE FIT TEST INSTRUMENT		5. TYPE OF REPORT & PERIOD COVERED Final Report 10 April 1981 - 30 July 1981 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Edward S. Kolesar, Jr., Captain, USAF Colette M. de la Barre, Staff Sergeant, USAF		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS USAF School of Aerospace Medicine (VNL) Aerospace Medical Division (AFSC) Brooks Air Force Base, Texas 78235		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 62202F 2729-00-20
11. CONTROLLING OFFICE NAME AND ADDRESS USAF School of Aerospace Medicine (VNL) Aerospace Medical Division (AFSC) Brooks Air Force Base, Texas 78235		12. REPORT DATE July 1982 13. NUMBER OF PAGES 138
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*		15. SECURITY CLASS. *(of this report)* Unclassified 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

Computer algorithm and electronic integrator; DEHP; Di-2-ethylhexyl phthalate; DOP; Electronic integrator; Industrial hygiene respirator test; Protection factor; Respirator qualitative fit testing; Respirator leakage; Respirator performance; Respirator quantitative fit testing; Respirator test and evaluation; RQFT; Voltage-to-frequency conversion.

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

Described in detail in this report is the United States Air Force School of Aerospace Medicine's modified di-2-ethylhexyl phthalate respirator quantitative fit test instrument and its application in fitting respirators to personnel for chemical warfare defense. The most significant modifications include a ganged potentiometer stray light calibration circuit, a direct current power buffer amplifier, and a voltage-to-frequency electronic integrator to facilitate the collection of respirator performance data. The utility of a computer algorithm to calculate protection factors is discussed. Since the design, calibration,

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

20. ABSTRACT (Continued)

operation, and maintenance of the di-2-ethylhexyl phthalate respirator quantitative fit test instrument are presented in this publication, it can be used as an operator's manual.

PREFACE

The authors are grateful to the people at the USAF School of Aerospace Medicine, Brooks AFB, Texas, who contributed suggestions and criticisms during the development of this report. Special thanks are due to Dr. Richard L. Miller and Mr. Clarence Theis of the Crew Environments Branch.

CONTENTS

CONTENTS (Cont'd.)

FIGURES

FIGURES (Cont'd.)

FIGURES (Cont'd.)

TABLES

DI-2-ETHYLHEXYL PHTHALATE RESPIRATOR QUANTITATIVE FIT TEST INSTRUMENT

INTRODUCTION

The correct training of every user to obtain the best possible fit of a respirator to his face is a serious concern in governmental and civilian work environments. It is vital that users understand the capabilities of a respirator they are required to wear and the degree of protection to expect. Most importantly, users must be confident that respirators can be fitted in a reproducible manner. The di-2-ethylhexyl phthalate (DEHP) respirator quantitative fit test (RQFT) instrument affords such a reliable, practical, and functional means for fitting respirators [5].

The Los Alamos Scientific Laboratory (LASL) is credited with developing the basic di-2-ethylhexyl phthalate respirator quantitative fit test method [6]. Two United States manufacturers market a commercial version of the LASL DEHP RQFT instrument [7,8]:

1. Air Techniques Incorporated
   1717 Whitehead Road
   Baltimore, Maryland 21207
   Telephone: (301) 944-6037
   (Mr. Samuel B. Steinberg, President)

2. Dynatech Frontier Corporation
   P.O. Box 30041
   Albuquerque, New Mexico 87110
   Telephone: (505) 226-7932
   (Dr. Charles L. Wright, Jr., President)

The United States Air Force (USAF) has several years of operational experience with the DEHP RQFT instrument. Currently, the Air Force Logistics Command (AFLC) has at least one DEHP RQFT instrument at each Air Logistics Center (ALC); and the Strategic Air Command (SAC) and the Military Airlift Command (MAC) have integrated the instrument into their aircraft maintenance functions. The USAF's objective is to fit and periodically verify the protection afforded by a respirator to those individuals involved with aircraft painting and refinishing.

In addition, the DEHP RQFT instrument has recently (1979) been integrated into the chemical warfare (CW) research and development (R&D) program at the Aerospace Medical Division's (AMD) USAF School of Aerospace Medicine (USAFSAM). The DEHP RQFT instrument complements the sodium chloride (NaCl) RQFT instrument to measure a respirator's protection factor (PF) afforded to the respiratory tract and eyes against CW agents in particulate, aerosol, or vapor form.

The Dynatech Frontier Corporation's Model FE259H DEHP RQFT instrument and Model FE222 Test Booth have been adapted and modified by USAFSAM to measure the PF in the respiratory and eye compartments of aircrew and groundcrew chemical defense respirators. The dual purpose of this report is to describe the unique modifications made to the DEHP RQFT instrument and to document the operation, calibration, data collection, and maintenance requirements. Shown in Figure 1 is the complete DEHP RQFT instrument; and in Figures 2-a and 2-b, the instrument's console and test booth.

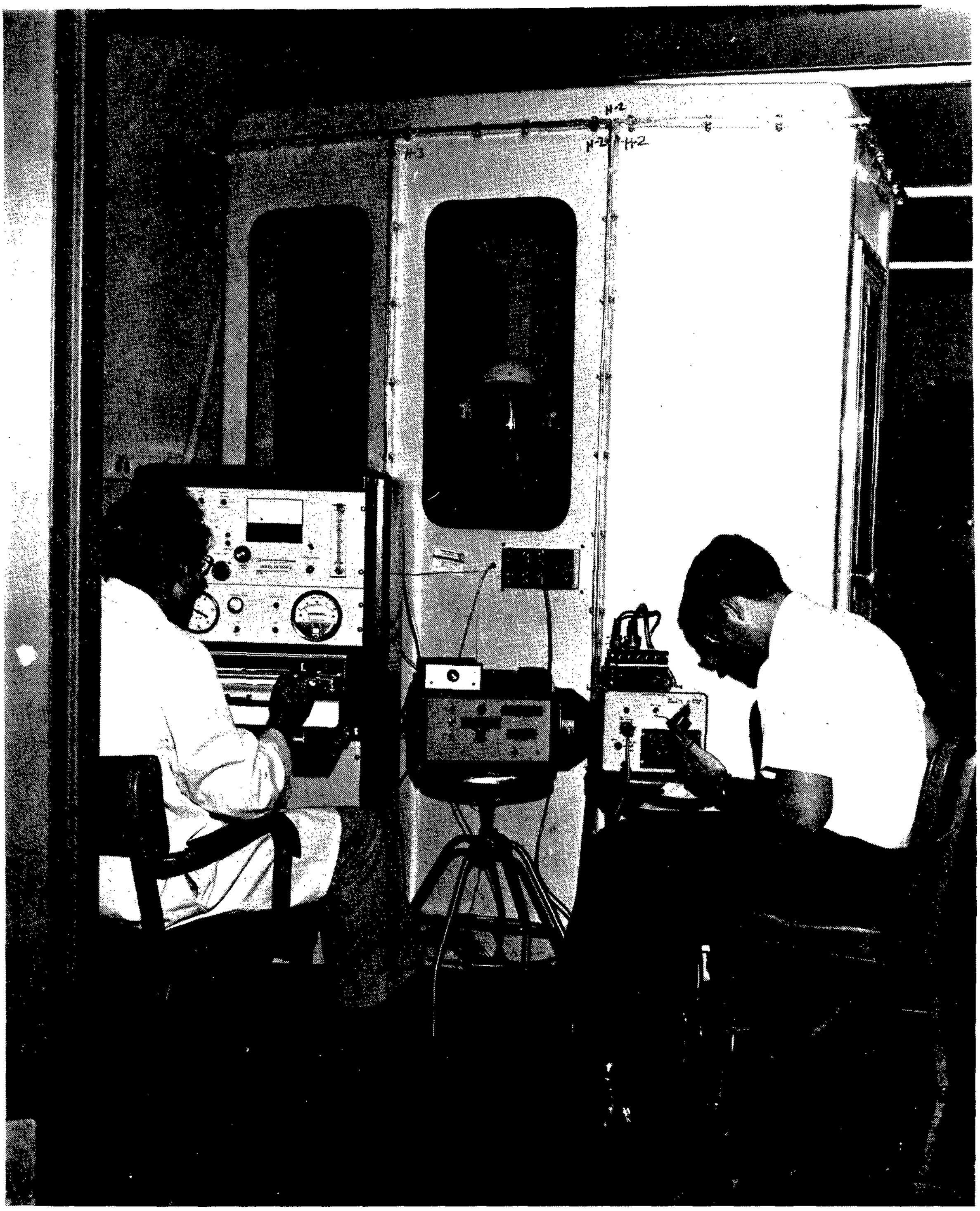


Figure 1. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test instrument.

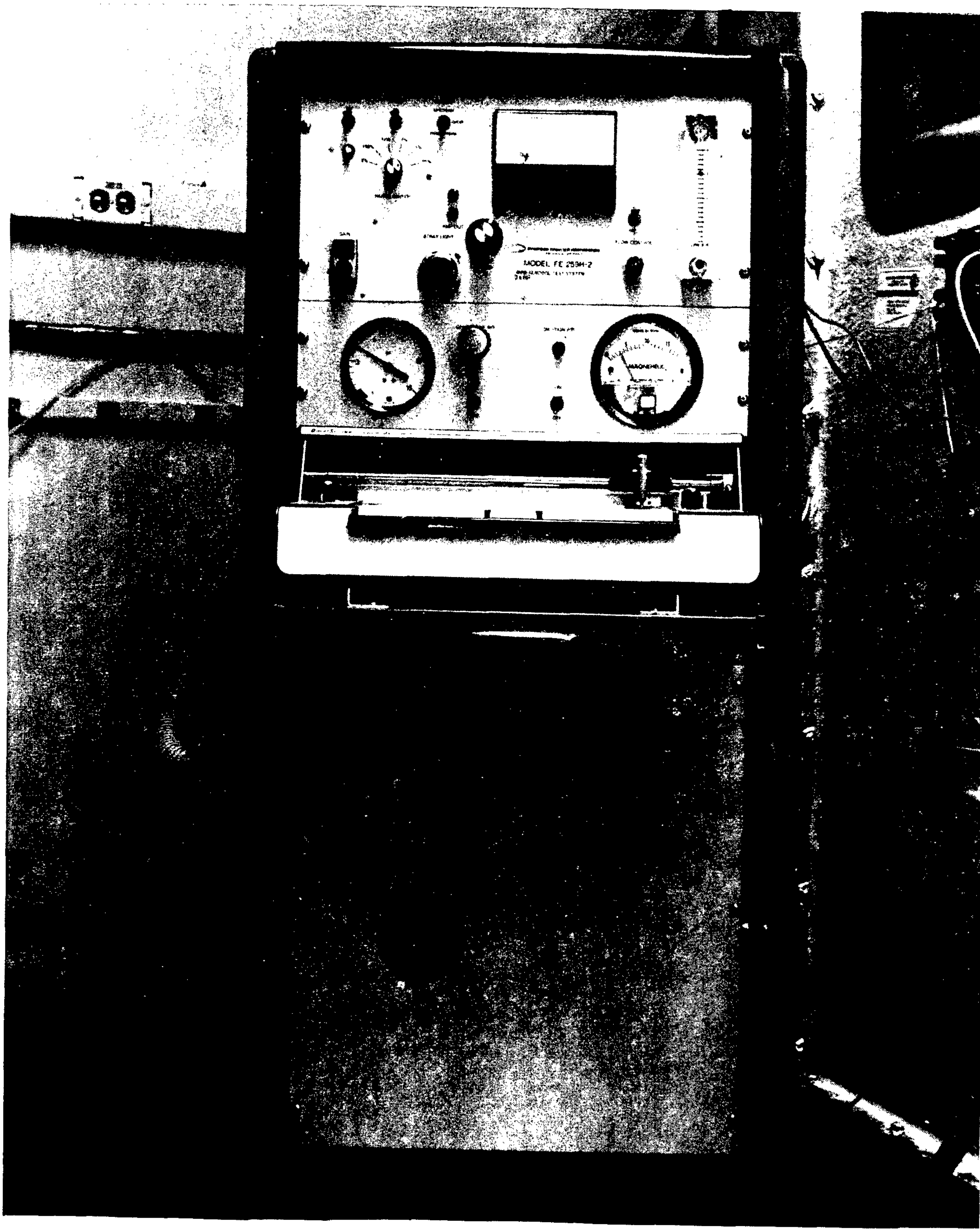


Figure 2-a. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test instrument console.

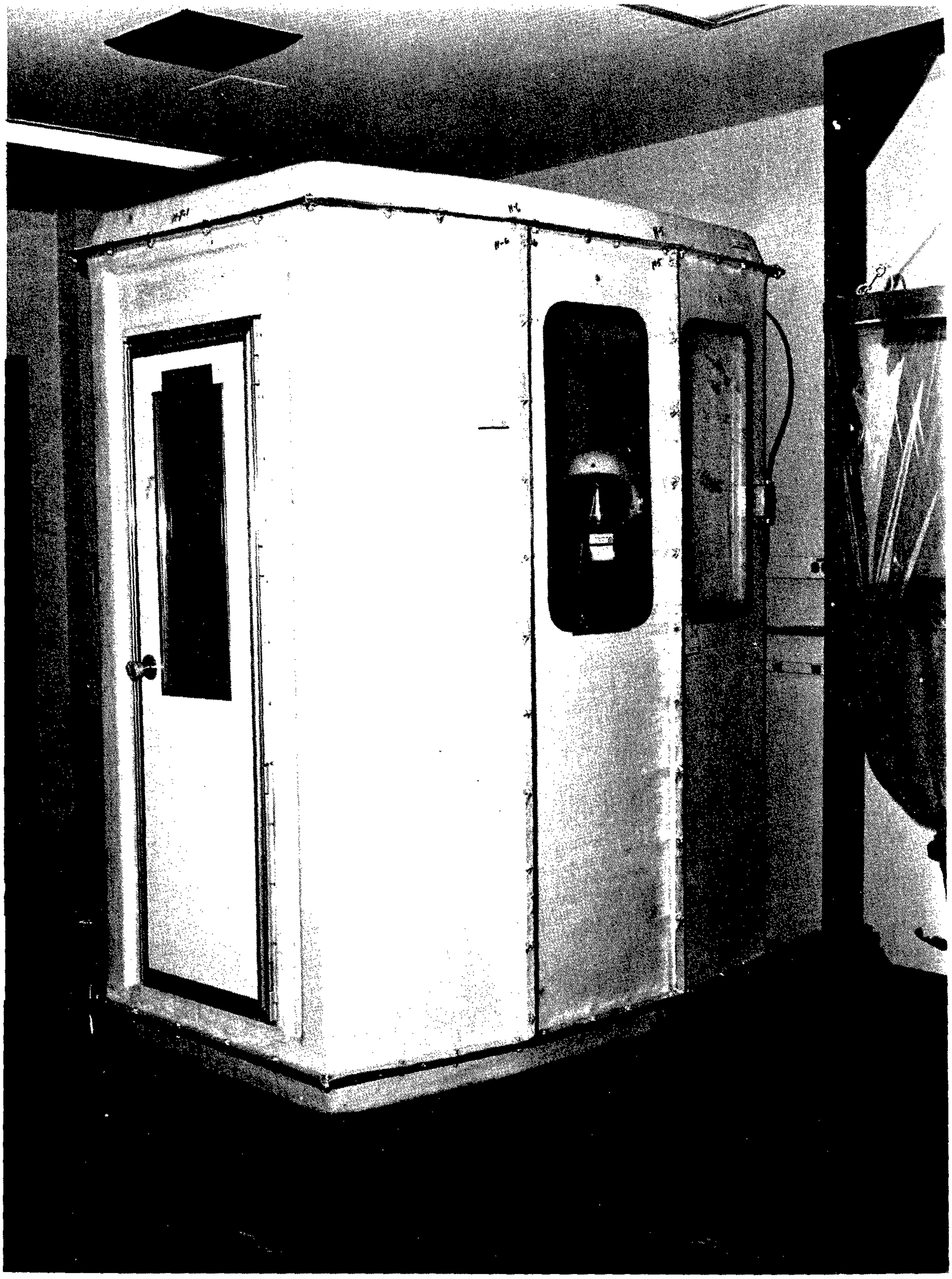


Figure 2-b. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test booth.

USAFSAM DI-2-ETHYLHEXYL PHTHALATE RESPIRATOR QUANTITATIVE FIT TEST INSTRUMENT

General Overview

THE USAFSAM DEHP RQFT instrument is routinely used to evaluate the performance of aircrew and groundcrew CW respirators. Performance is quantified by calculating a metric known as a protection factor (PF). A respirator PF is defined as the ratio of the ambient challenge atmosphere concentration external to the respiratory protective device to that of the sampled leakage concentration drawn from the interior of the respirator [2]. A respirator leak most often results from a poor face-to-facepiece seal or from improper construction of the respirator [9-11].

To accomplish a respirator quantitative fit test, a subject dons a respirator and, after having passed a preliminary qualitative fit test, enters the DEHP test booth. While the subject is making the appropriate connections to the breathing air supply, sampling line, and intercom, the console operator establishes a test booth equilibrated challenge atmosphere and baseline concentration. The operator directs the subject through a series of breathing and head movement exercises during which a DEHP sample is continuously drawn from the interior compartment of the respirator. The sample's concentration is quantified in the five-decade, linear-forward-light-scattering photometer. A record of the photometer's response is collected on a strip-chart recorder, and an electronic integrator is used to acquire the data to calculate the composite set of PFs. Having completed the exercise protocol, the operator rechecks the equilibrated test booth challenge and baseline concentrations. The subject disconnects from the intercom, sampling line, and breathing gas supply, and then exits the test booth. The operator proceeds to a computer terminal to calculate the subject's PFs.

Aerosol Generation System

The aerosol generation system consists of four major components: compressed air supply; aerosol generator and impactor; mixing and dilution chamber; and a dilution air blower (Fig. 3).

The DEHP challenge aerosol booth atmosphere is generated by atomizing liquid DEHP (Dynatech Frontier Corporation, Albuquerque, NM 87110) from the aerosol generator reservoir (Fig. 4). The aerosol generator (Naval Research Laboratory, Model III design, Chemistry Division, Washington, D.C. 20375) is supplied with a laboratory source of clean dry compressed air (Colt Industries Incorporated, Quincy Compressor Division, Model 32514 air compresser and Model 8256 refrigerated air dryer, Quincy, IL 62301), regulated to be in the

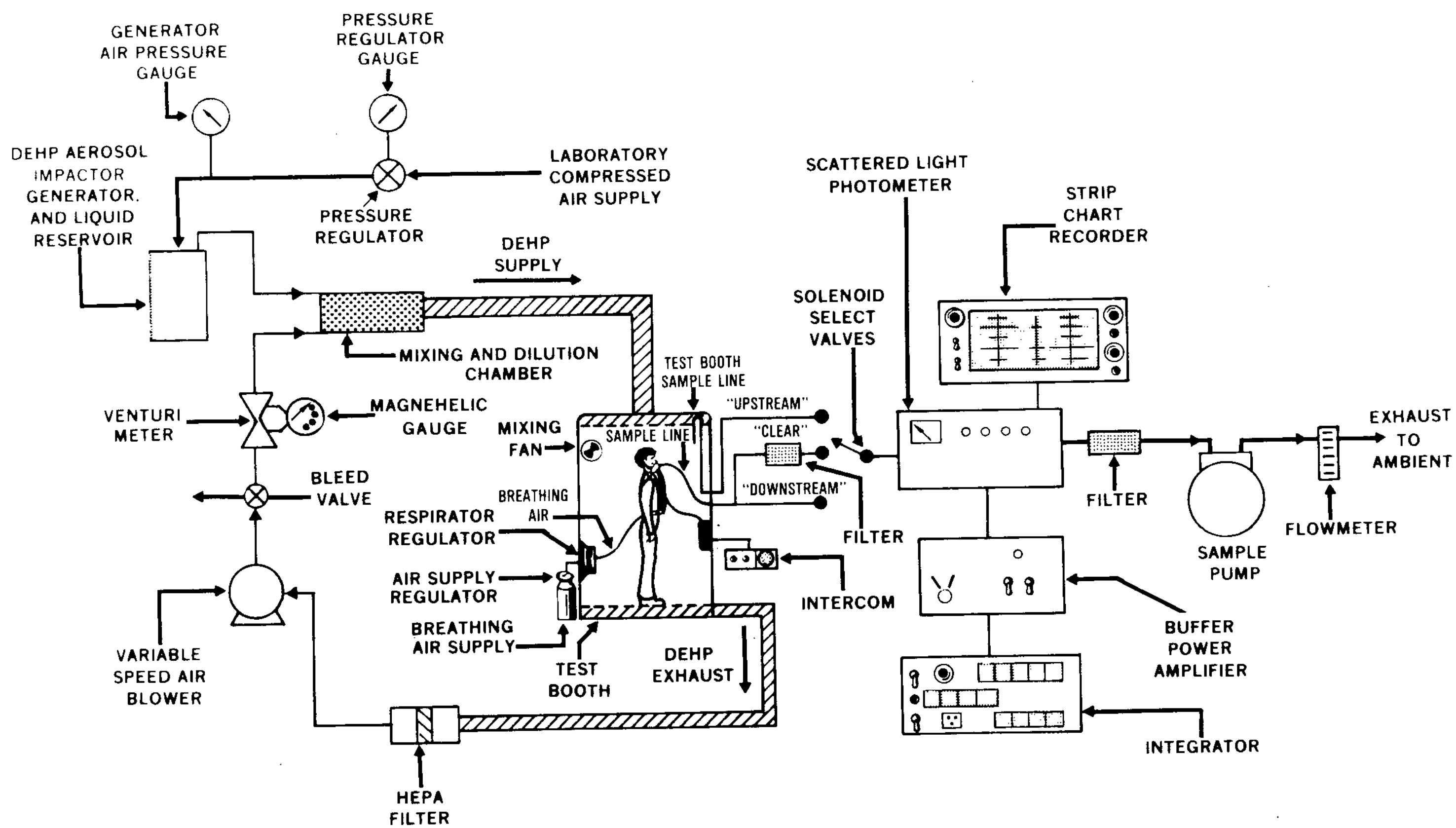


Figure 3. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test instrument schematic.

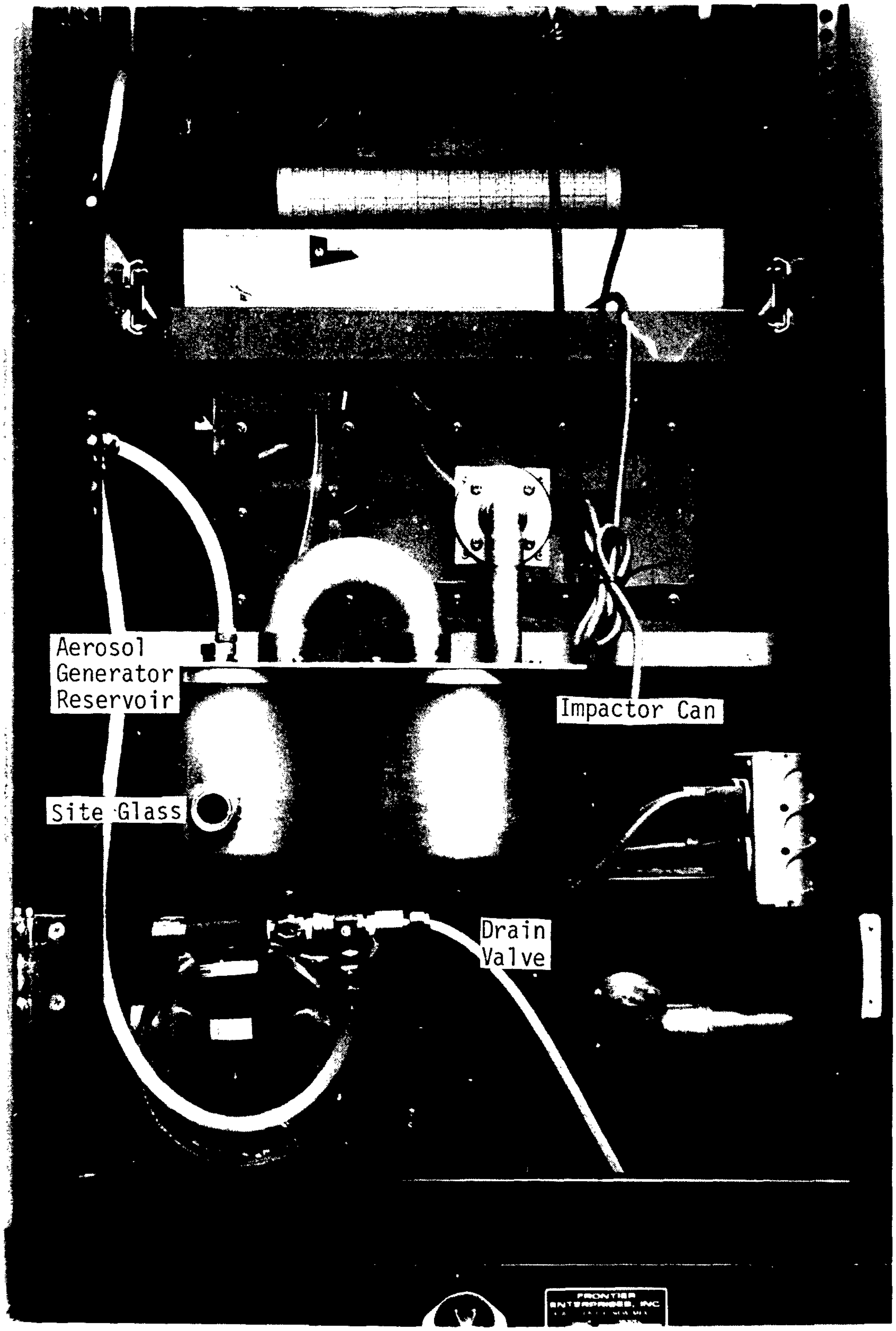


Figure 4. Di-2-ethylhexyl phthalate aerosol generation system.

range from 2 to 6 psig. When the compressed air enters the aerosol generator (Fig. 4), high-velocity air jets shear off droplets of the liquid DEHP to produce a coarse DEHP aerosol. This coarse DEHP aerosol is injected into the impactor assembly (Fig. 5) [1,2,4].

The impactor assembly (Fig. 5) is housed in a cylindrical acrylic container and is composed of an aerosol inlet and outlet, an impactor nozzle, and a percussion plate. The coarse DEHP aerosol particles from the aerosol generator enter the impactor can, travel at a high velocity through the nozzle, and strike the impactor plate. As a result, the DEHP aerosol produced has a mass median aerodynamic diameter (MMAD) particle size that ranges from 0.5 to 0.6 μm [1,2]. This DEHP aerosol then enters the mixing chamber (Fig. 5).

The concentration of the test booth's challenge DEHP aerosol is established and regulated in the mixing chamber with the air supply provided by the dilution air blower (Figs. 3 and 5). Air is drawn from the interior of the test booth (Dynatech Frontier Corporation, Model FE222 test booth, Albuquerque, NM 87110) through its perforated floor panel via the hose connected to the rear of the test booth (Figs. 6 and 7), and is processed in a HEPA filter (HEPA Corporation, Model C(8)8WA2, Anaheim, CA 92806). The filtered air then enters a variable-speed, two-stage, turbine-dilution air blower (Figs. 3 and 5). The dilution air flow is regulated by the blower's speed which, in turn, is controlled by a variable transformer (Fig. 8). A "T" connection channels dilution air to the ambient atmosphere to maintain a slightly negative pressure in the test booth. A calibrated orifice mated with the differential pressure magnehelic gauge (Dwyer Instruments Incorporated, Cat. No. 2020, Michigan City, IN 46360) is used to regulate and meter the dilution air to the mixing chamber. The mixing chamber consists of a rectangular box (Fig. 5), perforated distribution plate, and baffle plate. The dilution air from the variable speed blower enters the mixing chamber, passes through the holes in the distribution plate, mixes with the DEHP aerosol from the impactor assembly, and then passes over the baffle plate and through a port on the side of the DEHP instrument's console (Fig. 7). The DEHP challenge atmosphere is delivered to the top of the test booth through a hose (Fig. 6). The ceiling of the test booth is perforated to distribute the DEHP challenge atmosphere, and two fans (Fig. 9) are used to circulate the aerosol. The result is a DEHP booth aerosol challenge atmosphere whose particle size and concentration are 0.5 - 0.6 μm and 25 $mg/m^3 \pm 5\ mg/m^3$, respectively [1,2].

Aerosol Sampling System

The concentration of the DEHP challenge atmosphere that leaks into the visual compartment of a respirator during an RQFT is determined by continuously sampling air from this site and analyzing the sample with a five-decade, linear-forward-light-scattering photometer. An aluminum sampling tube (Figs. 10-a and 10-b), approximately 2.5 cm in length and 0.6 cm in diameter, is fitted through and sealed to the respirator's visor so that the distance from the cornea to the open end of the tube interior to the visor is not greater than 2 cm. One end of a short length of Tygon tubing is attached to the open end of the aluminum sampling tube (exterior to the respirator's visor), and the opposite end of the tubing is passed through a sealed port in the test booth (Fig. 11). The open end of the Tygon tubing exiting the test booth connects to the downstream sample port on the side panel of the DEHP instrument's console (Fig. 12).

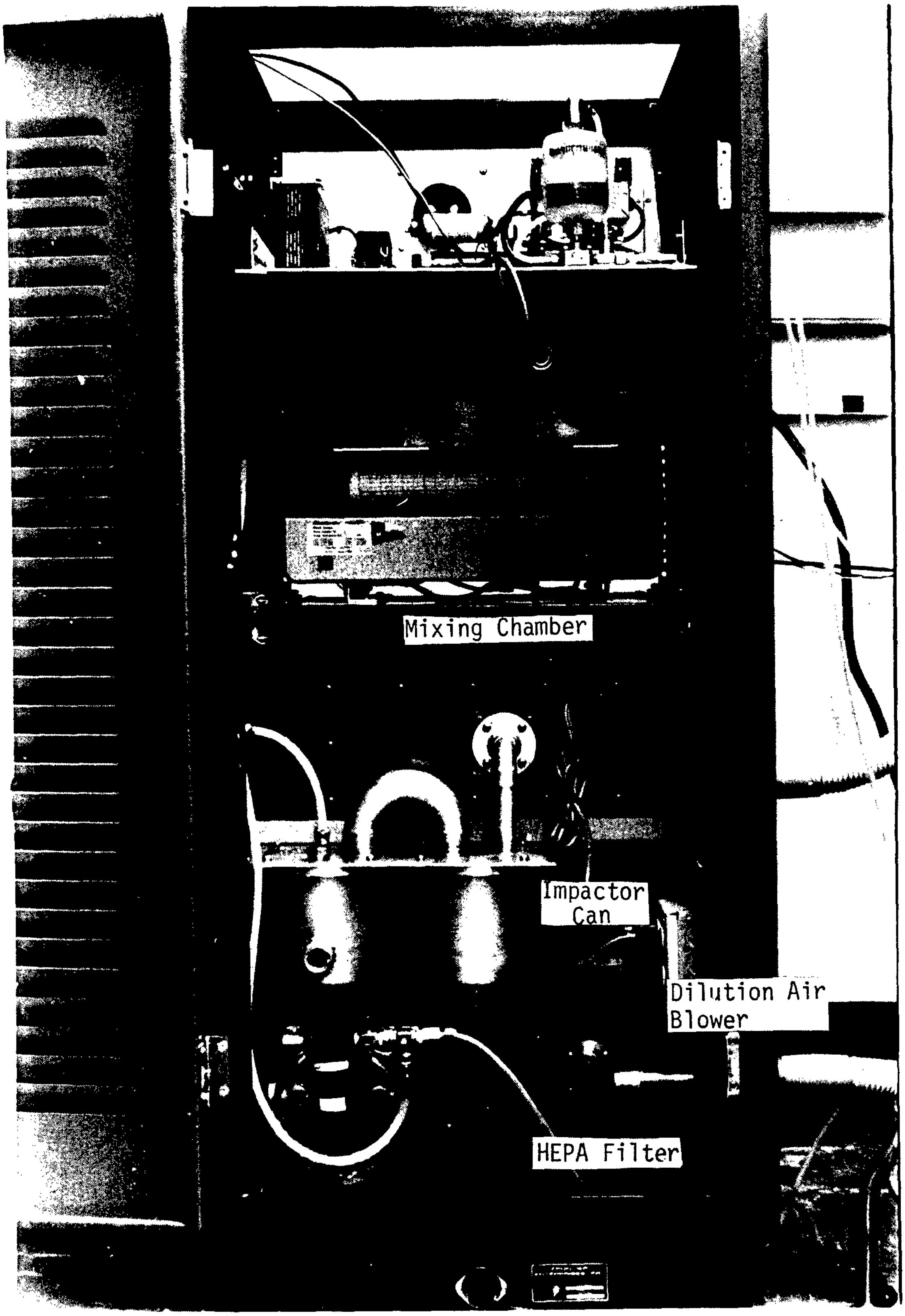


Figure 5. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test instrument console (inside rear view).

Figure 6. Test booth showing fan switch and DEHP aerosol inlet and outlet hoses.

Figure 7. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test instrument console (side view).

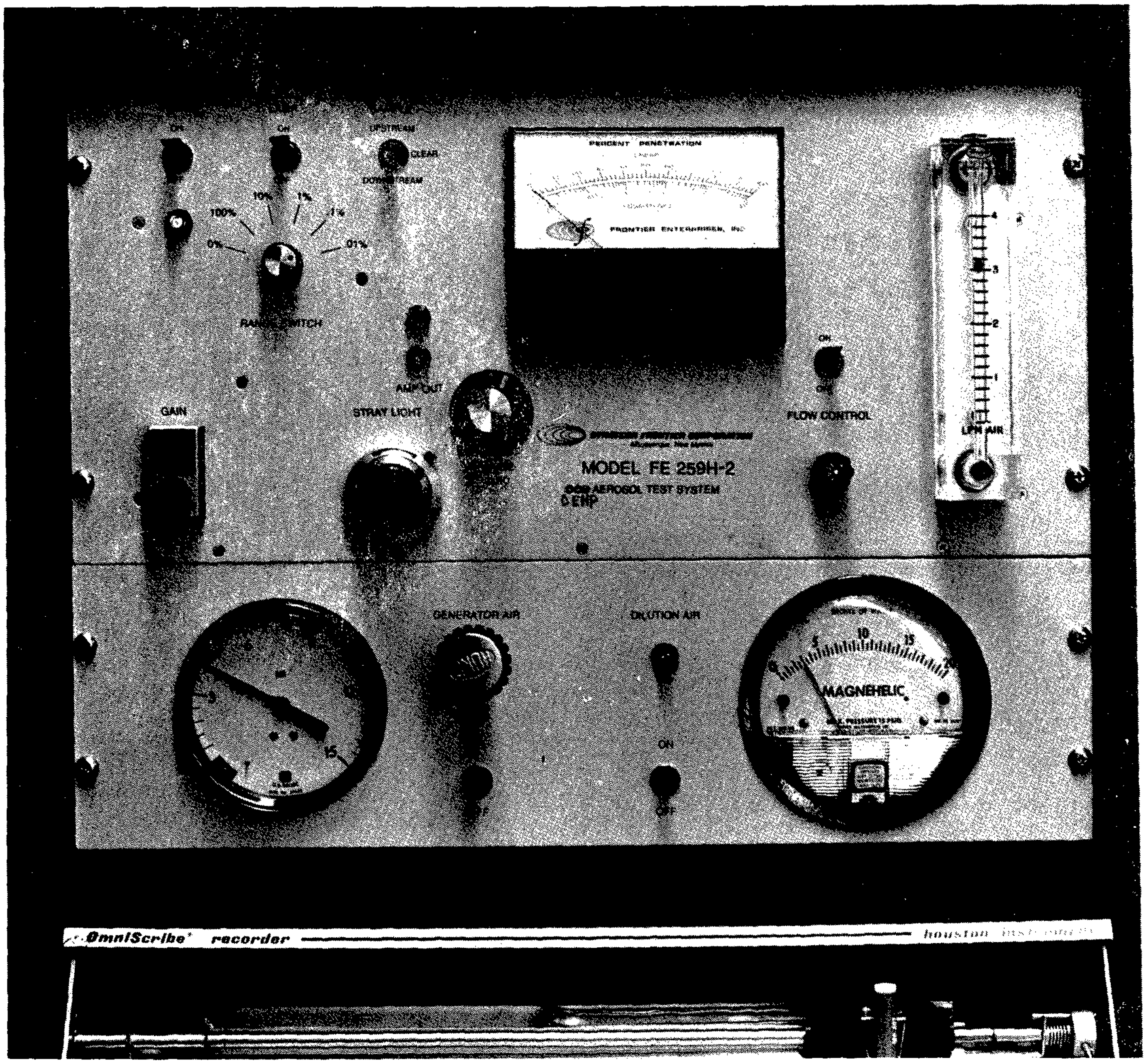


Figure 8. USAFSAM di-2-ethylhexyl phthalate respirator quantitative fit test instrument console's front panel.

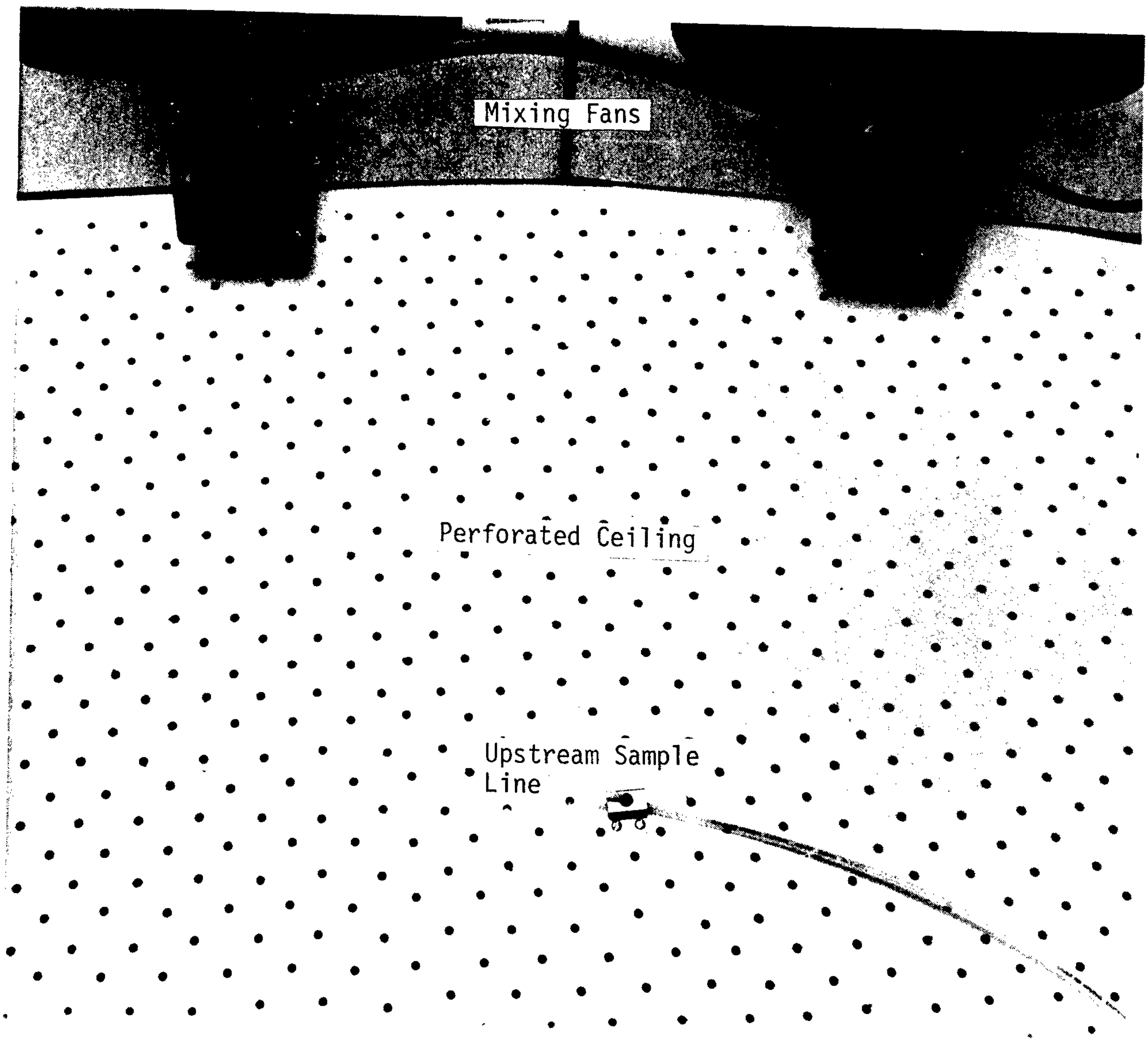
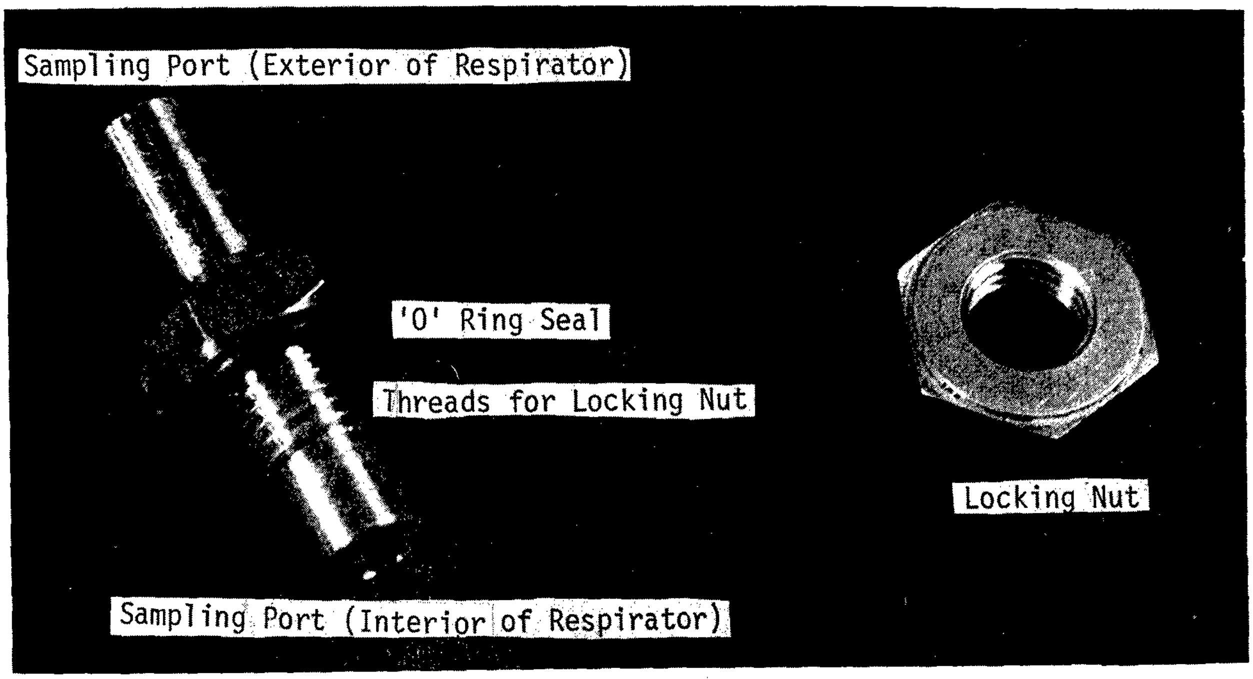


Figure 9. Test booth ceiling.



Figures 10-a. Aluminum sampling tube.

Figure 10-b. Test respirator (MBU-13/P).

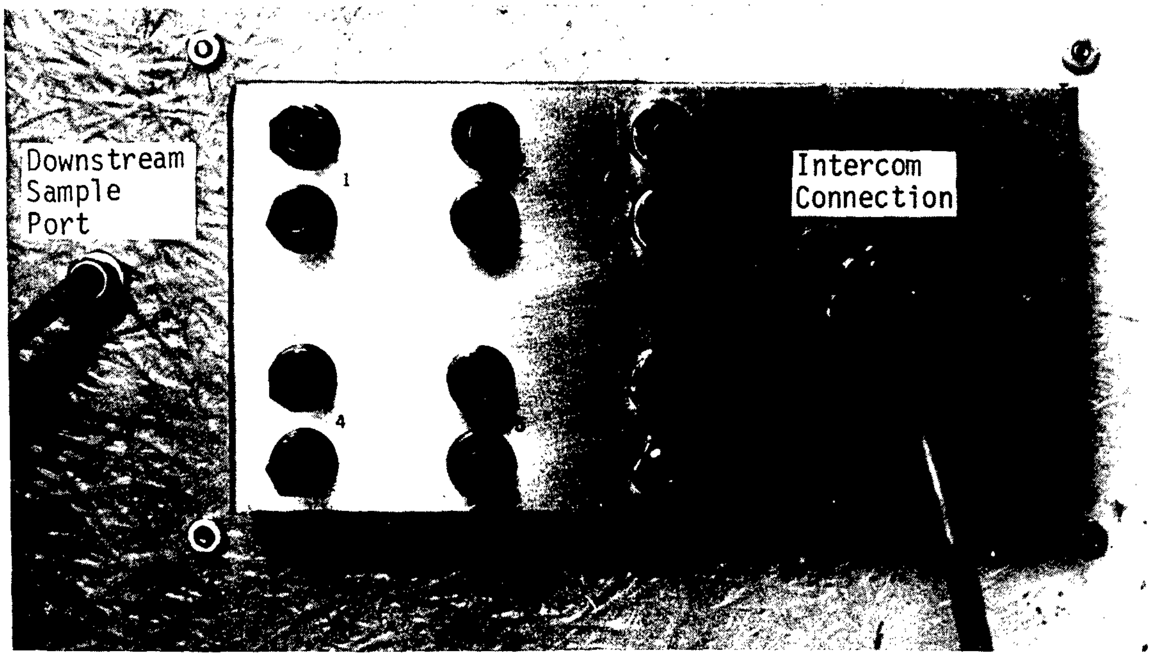


Figure 11. Side of test booth showing intercom connection and downstream sample port.

Figure 12. USAFSAM di-2-ethyhexyl phthalate respirator quantitative fit test instrument console (side view) showing inlet sample ports.

The air sample is drawn from the visual compartment of the respirator at a constant 3 liters/min flow rate by a small capacity (1- to 6-liters/min) diaphragm (sample) pump, and is injected into the light-scattering chamber for analysis (Fig. 13). The sampling flow rate is monitored by means of the flowmeter (Dwyer Instruments Incorporated, Michigan City, IN 46360) on the DEHP instrument console's front panel (Fig. 8). The 3 liters/min flow rate was selected because it minimized creating a negative pressure within the respirator's visual compartment [2,4].

The sampling pump (Fig. 13) operates in three distinct sampling modes: upstream, downstream, and clear (Fig. 3). During upstream sampling, the ambient DEHP challenge aerosol is drawn directly from inside the test booth, routed through a sealed port on the wall of the test booth (Fig. 14), and passed to the upstream sample port located on the DEHP instrument console's side panel (Fig. 12).

In the downstream sampling mode (Fig. 10-b), air is drawn from the interior visual compartment of the respirator and passed through the downstream sampling port (Figs. 11 and 12) for subsequent quantification.

In the clear sampling mode (Figs. 3 and 15), air is drawn from inside the visual compartment of the respirator and passed through a high-efficiency filter (Pall Corporation, disposable filter assembly Part No. DFA4001AR, Cortland, NY 13045) [1].

After the air sample has been analyzed for DEHP concentration by the light-scattering photometer, and before being drawn through the sample pump and flowmeter, the air sample passes through the PMT sample cell DEHP filter (DELTECH Engineering Incorporated, Model No. 020, New Castle, DE 19720) (Figs. 3 and 15).

Aerosol Detection System

The DEHP challenge aerosol sampled from the interior of a respirator during an RQFT is analyzed by a five-decade, linear-forward-light-scattering photometer (Dynatech Frontier Corporation, Model FE971, Albuquerque, NM 87110). To measure the concentration of the aerosol sampled, the photometer detects the intensity of the light scattered by the aerosol particles drawn through the light-scattering chamber of the photometer and converts the scattered-light intensity to an electrical current. The current is electronically processed and displayed on a calibrated meter (Fig. 8) and a linear strip-chart recorder (Fig. 16) (Bausch and Lomb Incorporated, Model B5116-1, Houston Instrument Division, Austin, TX 78753). Figure 17 is a functional diagram of the light-scattering photometer [1,2].

The incident light intensity (I_i) is generated by a high-intensity filament lamp (General Electric Company, Model GE1434, Cleveland, OH 44117; or Newark Electronics, Corpus Christi, TX 78415) and focused into the light-scattering chamber (Fig. 17).

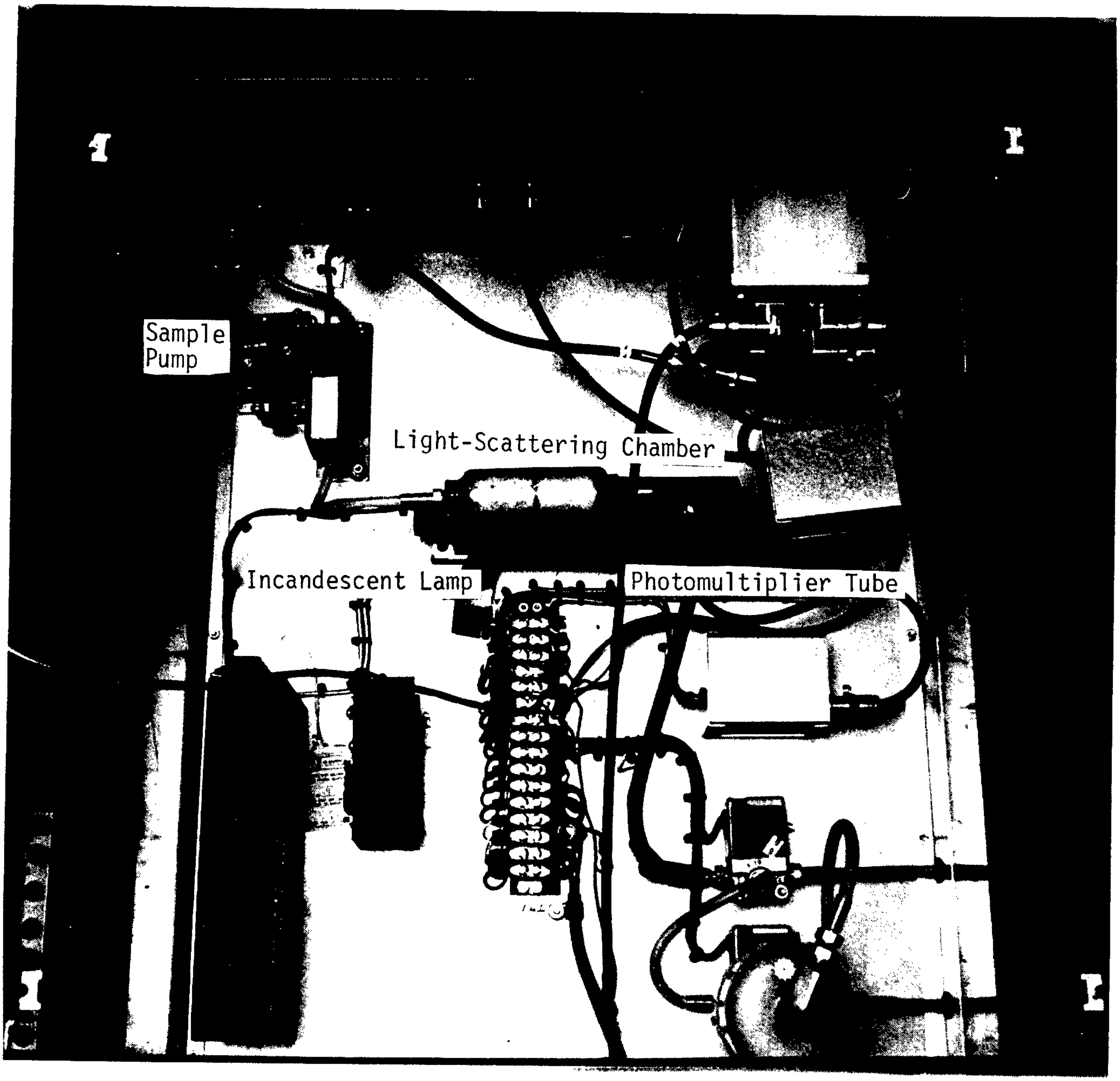


Figure 13. USAFSAM di-2-ethyhexyl phthalate respirator quantitative fit test instrument console (inside top view).

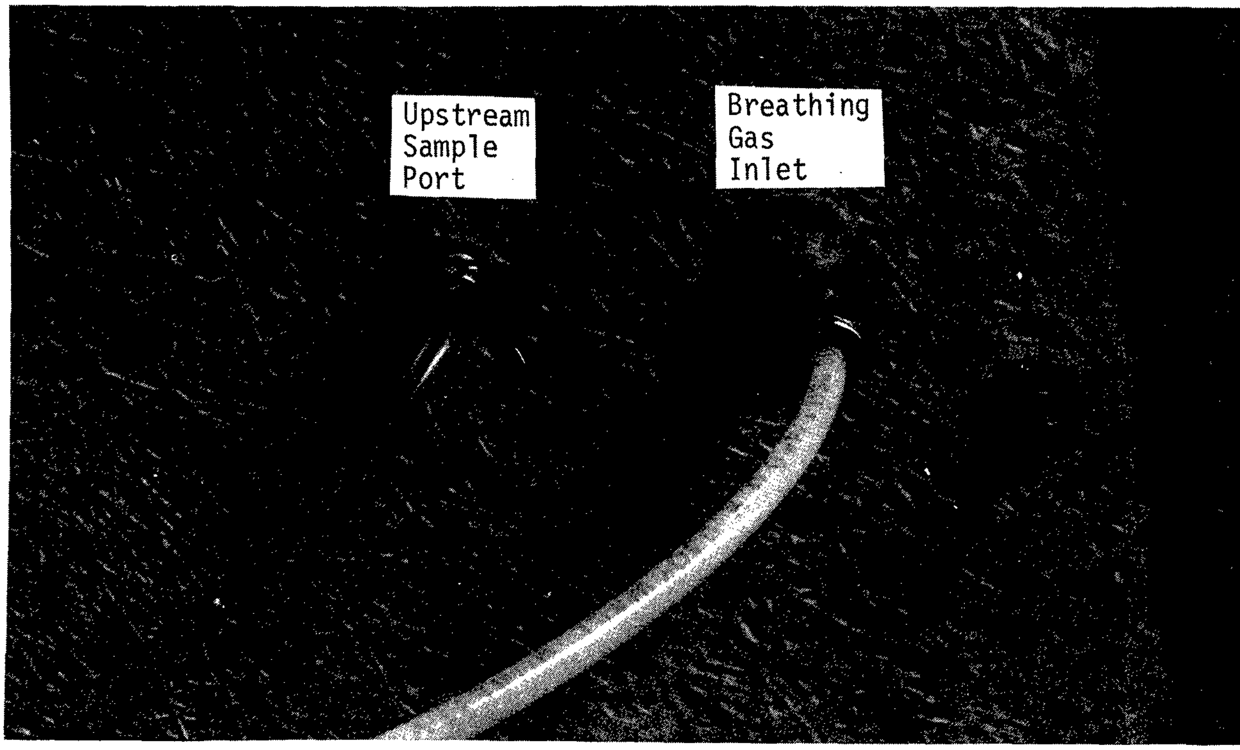


Figure 14. Side of test booth, showing upstream sample port and breathing gas inlet.

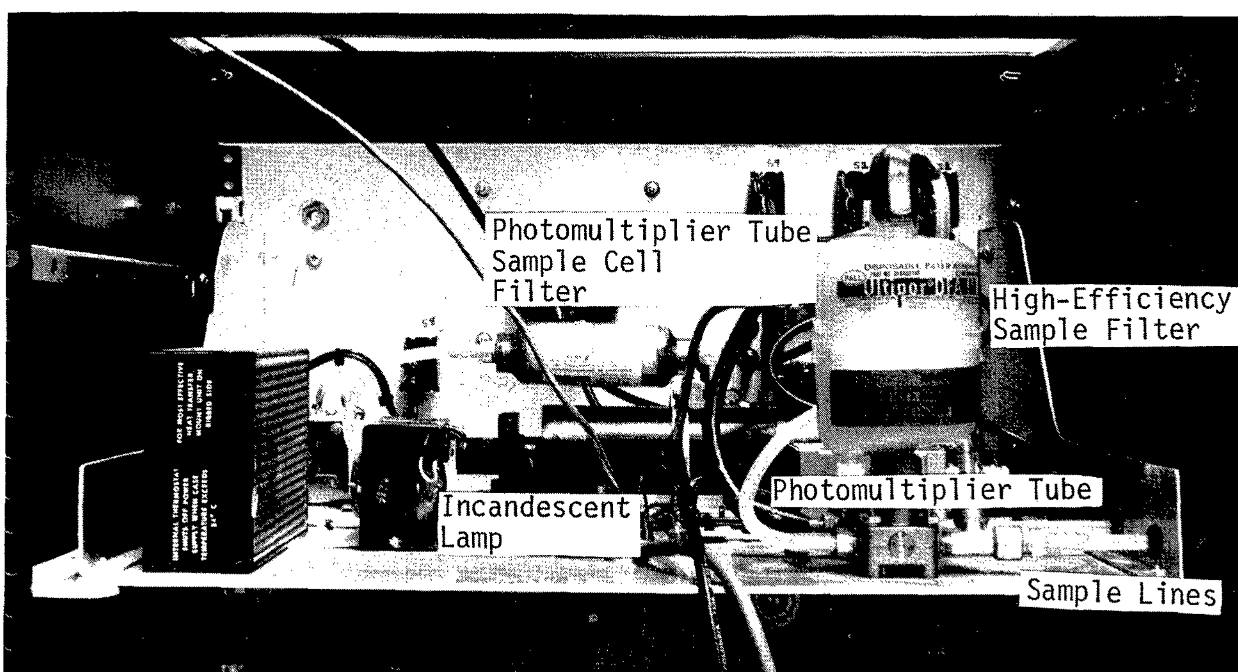


Figure 15. Di-2-ethylhexyl phthalate aerosol sampling and detection systems.

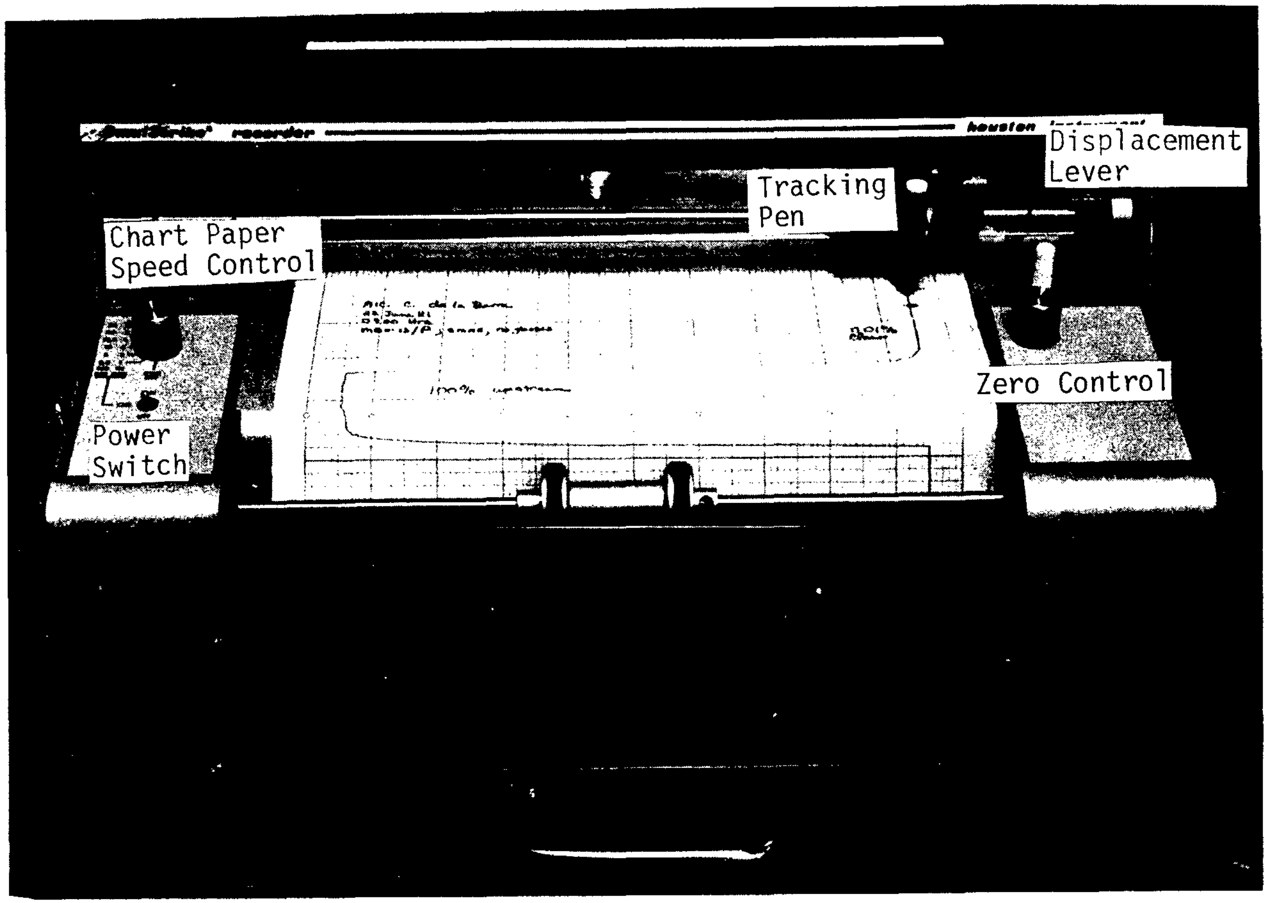
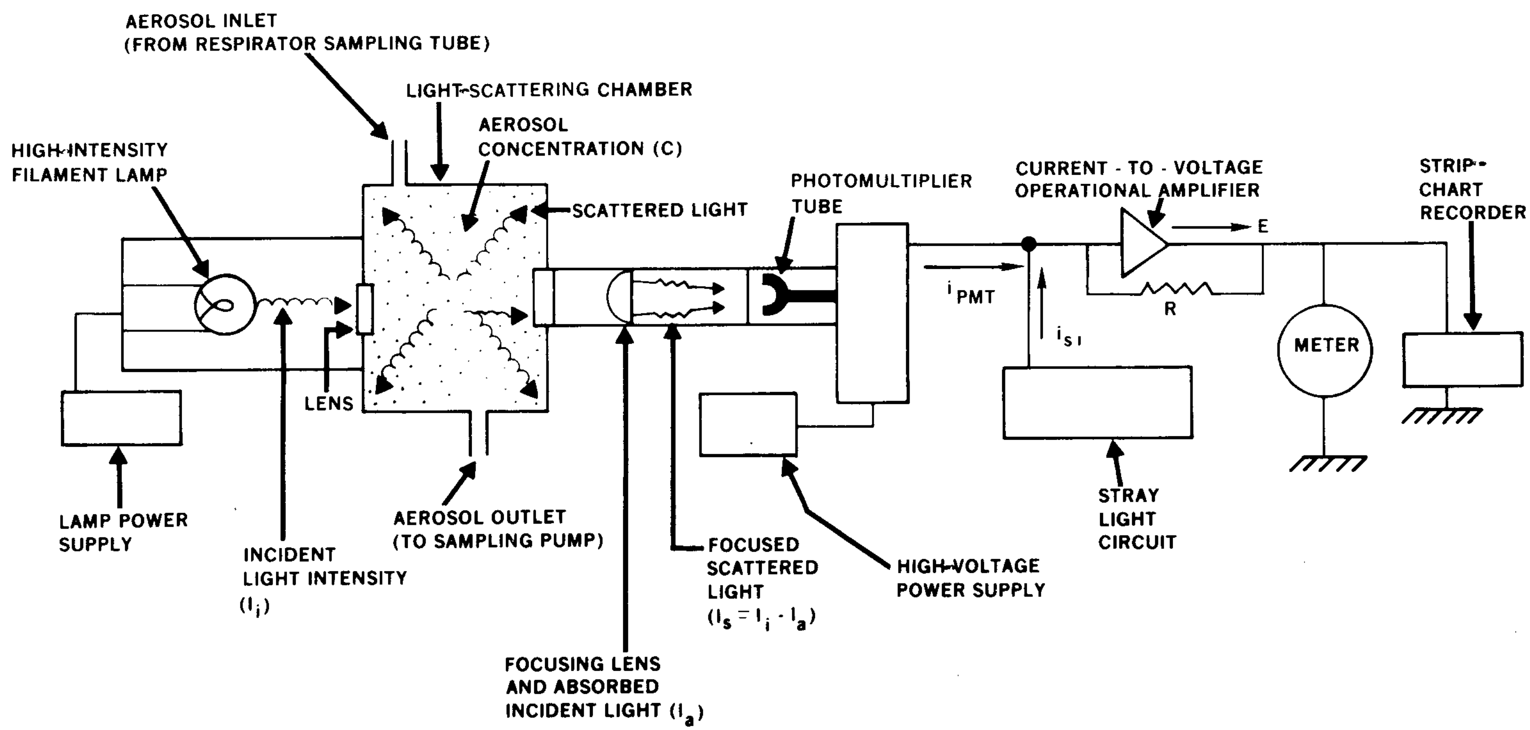


Figure 16. Strip-chart recorder.



Figurc 17. A light-scattering photometer (functional diagram).

When the DEHP aerosol particles are drawn through the light-scattering chamber, a fixed amount of the incident light intensity (I_i) is absorbed (I_a) that is directly proportional to the concentration of the DEHP aerosol. Therefore, the scattered light intensity (I_s) can be expressed as [2]:

$$I_s = I_i - I_a \tag{1}$$

The scattered-light intensity (I_s is focused on a photomultiplier tube (PMT) (RCA Corporation, Model RCA931b, Lancaster, PA 17604; or Newark Electronics, Corpus Christi, TX 78415) which converts the light signal into an electrical current signal. The relative magnitude of the electrical current produced by the PMT is also a function of the high-voltage power supply (Fig. 17). Thus, the overall PMT sensitivity to a given concentration of DEHP aerosol can be established by adjusting the magnitude of the high-voltage power supply [2].

A current-to-voltage operational amplifier circuit is used to produce the voltage signal compatible with the strip-chart recorder. The current-to-voltage conversion process is determined by the value of the feedback resistance (R) (Fig. 17). Thus, the selection of (R) determines the range of the voltage signal that can be displayed on the strip-chart recorder [2].

One of the important elements of the light-scattering photometer is the stray-light circuit. The light signal incident on the PMT is composed of: a component due to scattering by the sampled DEHP aerosol; and a stray or undesirable component due to imperfect optics, undesirable reflections, contamination of the system, and the PMT's dark-current response. Before the voltage signal is displayed on the strip-chart recorder, it is necessary to compensate for this stray-light component.

Operator adjustment of the DEHP instrument compensates for the stray-light component. The "sample" select switch (Fig. 8) is positioned in the clear sampling mode, thus purging the light-scattering chamber with clean ambient air via the high-efficiency filter in the sampling system. The operator adjusts the instrument's stray-light controls (Fig. 8) to produce a zero reading on the instrument's front panel meter (Fig. 8). To expedite the stray-light calibration process, the electronics have been modified to provide the operator with a ganged, coarse-fine adjustment potentiometer arrangement (Fig. 8). A schematic of the modified stray-light adjustment circuit is shown in Figure 18.

The effect of the stray-light compensating adjustment is to produce an opposite current signal (i_{sl}) which, when added to the PMT's current signal (i_{PMT}), results in a net current signal of zero magnitude. Thus, the current-to-voltage operational amplifier yields a voltage signal of zero magnitude for a zero magnitude input current signal [2].

The photometer has five sampling ranges for detecting the concentration of DEHP challenge aerosol particles drawn through the light-scattering chamber: 0-100%, 0-10%, 0-1%, 0-0.1%, and 0-0.01%. These penetration ranges correspond to the sampling range switch positions on the DEHP instrument console's front panel (Fig. 8). USAFSAM's RQFT CW respirator studies are usually accomplished when the light-scattering photometer is set for maximum sensitivity (sampling range switch position ".01%"). However, the other sampling range switch positions can be used when higher respirator leakages are anticipated.

Calibration

Because the ambient DEHP challenge aerosol must be generated and maintained at a fixed concentration in the test booth (nominally 30 mg/m^3 for full-face respirator tests), two adjustments must be made to the DEHP instrument. After the ambient temperature (°F) and barometric pressure (cm Hg) have been measured, the aerosol generator air pressure and aerosol dilution air differential pressure settings are determined (see Appendix A). To determine these settings, the operator begins by selecting an aerosol generator air pressure value that falls in the range of 3 to 5 psig and dials this setting on the generator air pressure gauge (Ametek Incorporated, Dial No. 37338, U.S. Gauge Division, Sellersville, PA 18960) (Fig. 8). Since the aerosol dilution air differential pressure setting is dependent on the temperature, barometric pressure, and aerosol generator air pressure, Table A-1 in Appendix A was

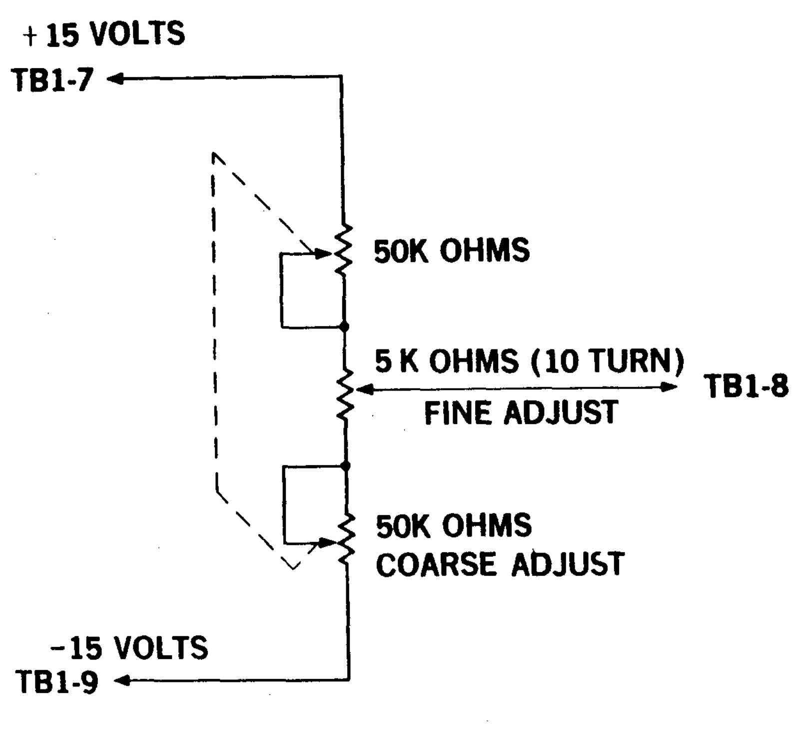


Figure 18. USAFSAM modified stray-light adjustment circuit.

produced to simplify the identification of this setting. If the tabulated aerosol dilution air differential pressure setting is not "on-scale" for the generator air pressure selection made, the operator must select a different aerosol generator air pressure setting so that both settings are on-scale. After the aerosol generator air pressure and aerosol dilution air differential pressure settings are determined, the startup procedure can be implemented [2].

After the DEHP RQFT system has reached operating equilibrium, the stray-light and photometer gain adjustments can be made by implementing the procedure outlined in the "DEHP Instrument Calibration" section. Stray-light and photometer gain settings determine optimum performance of the light-scattering photometer electronics. An adjustment to the "STRAY-LIGHT" or "GAIN" controls (Fig. 8) results in a shift in the strip-chart recorder's baseline and test booth challenge concentration responses, respectively.

OPERATION OF THE DI-2-ETHYLHEXYL PHTHALATE RESPIRATOR QUANTITATIVE FIT TEST INSTRUMENT

The sequence of procedures required to start up, calibrate, perform an RQFT, shut down, and calculate PFs for the DEHP instrument are outlined in this report section.

Startup Procedure

The DEHP RQFT system must reach an operating equilibrium before calibration is accomplished. The process required to establish an operating equilibrium is known as the "startup" procedure, for which the operator must perform the following steps:

1. Drain any residual DEHP from the impactor can by using the drain valve (Fig. 4). Close the drain valve.

2. Add DEHP to the aerosol generator reservoir so that its level is 0.375 in. (0.953 cm) above the base of the site glass (Fig. 4).

3. Toggle the "POWER" switch (Fig. 8) to the "ON" position.

4. Turn the compressed air regulator "ON" (Matheson Gas Corporation, Model No. 3476, East Rutherford, NJ 07073) (Fig. 19).

5. Adjust the "GENERATOR AIR" pressure valve until the gauge indicates the desired aerosol generator pressure setting (Fig. 8)--tabulated in Appendix A.

6. Toggle the "DILUTION AIR" blower switch (Fig. 8) to the "ON" position.

7. Adjust the variable transformer control (Figs. 2-a and 20) until the magnehelic gauge (Fig. 8) indicates the aerosol dilution air differential pressure setting (tabulated in Appendix A).

8. Toggle the "SAMPLE" select switch to "CLEAR," and set the "RANGE SWITCH" to the ".01%" position (Fig. 8).

9. Toggle the test booth fan switch (Fig. 6) to the "ON" position.

10. Toggle the "FLOW CONTROL" switch (Fig. 8) to the "ON" position.

11. Toggle the "LAMP" switch (Fig. 8) to the "ON" position.

12. Set the buffer power amplifier's "GAIN" switch to "50" (Fig. 21).

13. Toggle the buffer power amplifier's "POWER" switch (Fig. 21) to the "ON" position.

14. Toggle the integrator's "COUNT" switch to the "HOLD" position (Fig. 21).

15. Toggle the integrator's "POWER" switch (Fig. 21) to the "ON" position.

16. Toggle the integrator's "METER" switch to the "RUN" position (Fig. 21).

17. Wait 45 min to allow the system to reach operating equilibrium.

DEHP Instrument Calibration

DEHP instrument calibration is accomplished by implementing the following procedure:

1. Set the strip-chart recorder chart paper (Bausch and Lomb Corporation, Chart No. EC-100 chartpaper, Houston Instrument Division, Austin, TX 78753) speed control to the 2 in. per min setting (Fig. 16).

2. Toggle the strip-chart recorder power switch (Fig. 16) to the "ON" position.

3. Lower the strip-chart recorder pen (Bausch and Lomb Corporation, Part No. MP-497 pens, Houston Instrument Division, Austin, TX 78753) onto the paper, using the displacement lever (Fig. 16).

4. Check that the "RANGE SWITCH" is set to ".01%," and that the "SAMPLE" select switch is set to "CLEAR" (Fig. 8).

5. Adjust the "STRAY LIGHT" controls (Fig. 8) until the meter indicates "0" percent penetration (Fig. 8).

6. Adjust the strip-chart recorder pen "ZERO CONTROL" so that the pen tracks 5 minor divisions to the left of the chart paper's true zero (Fig. 16).

7. Set the "RANGE SWITCH" to the "100%" position, and the "SAMPLE" select switch to "UPSTREAM" (Fig. 8).

8. Allow the test booth challenge concentration to stabilize (strip-chart recorder pen trace will plateau).

9. Adjust the "GAIN" control (Fig. 8) until the strip-chart recorder pen tracks 9.5 major divisions on the chart paper (Fig. 16).

10. Set the "SAMPLE" select switch to "CLEAR," carefully rotate the "RANGE SWITCH" through its range positions (large to small values), and stop at the ".01%" position (Fig. 8). Allow the baseline to stabilize at the ".01%" setting.

11. Repeat steps 5 and 7-10 until no additional adjustments are required.

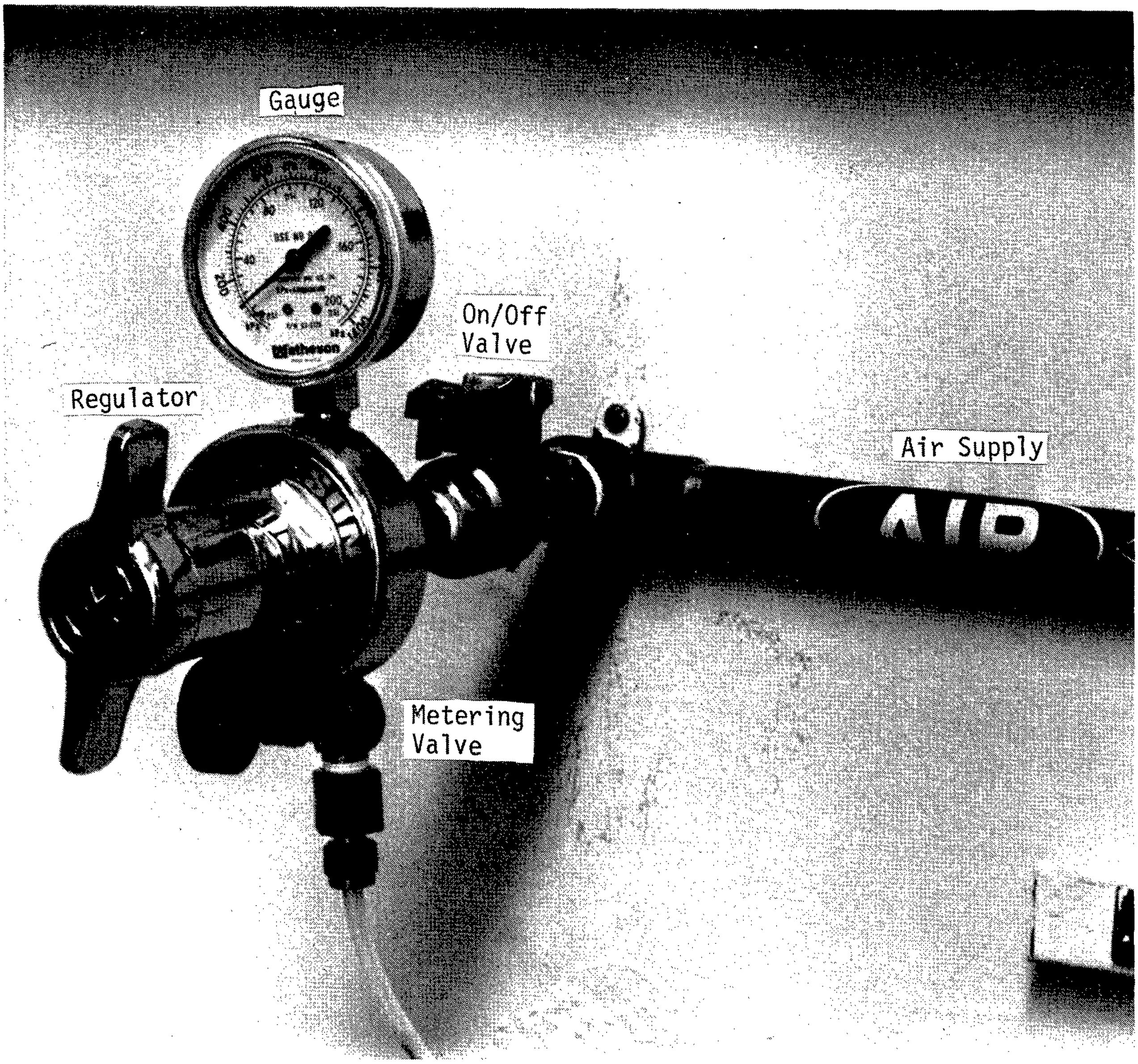


Figure 19. Compressed air regulator and gauge.

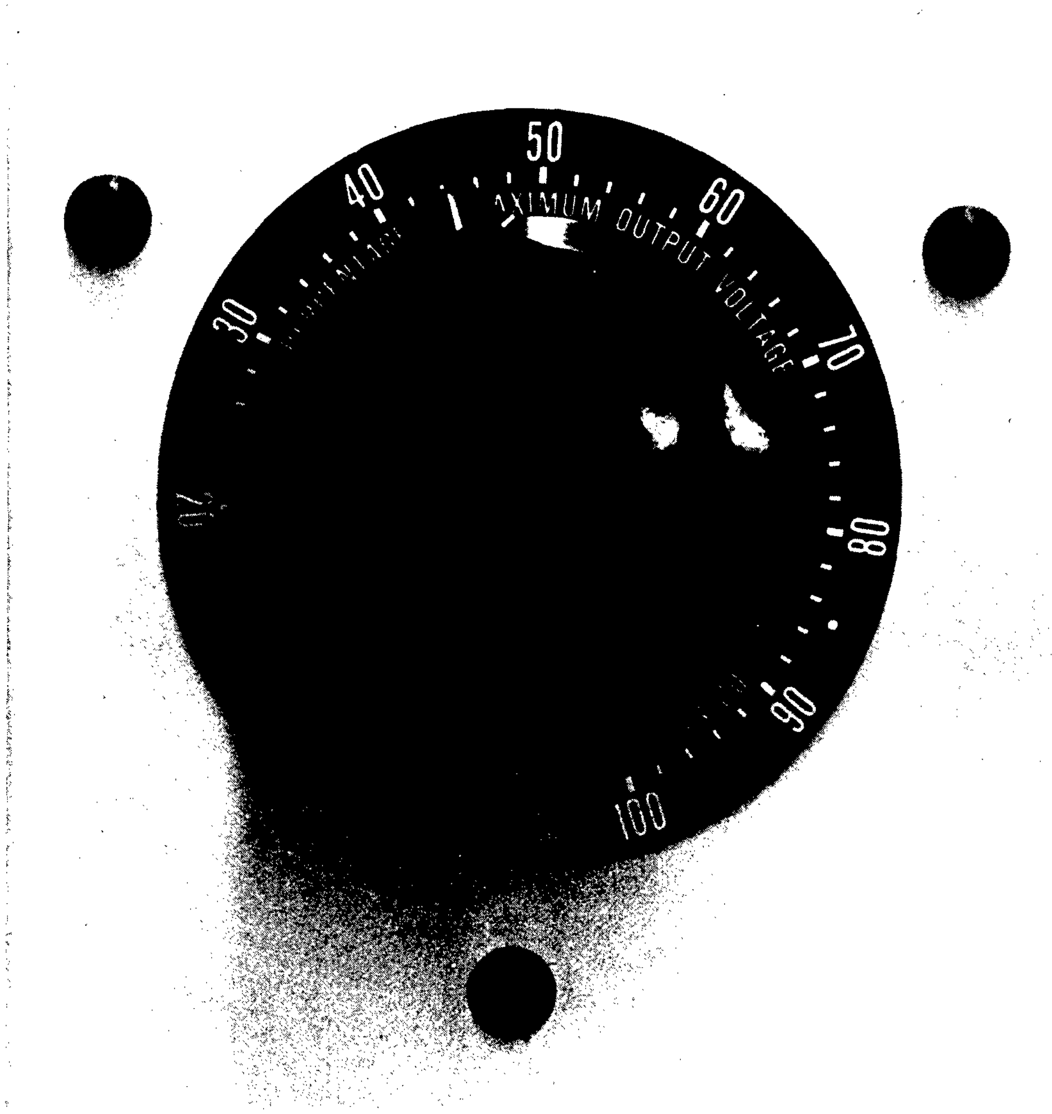


Figure 20. Variable transformer control for magnehelic gauge.

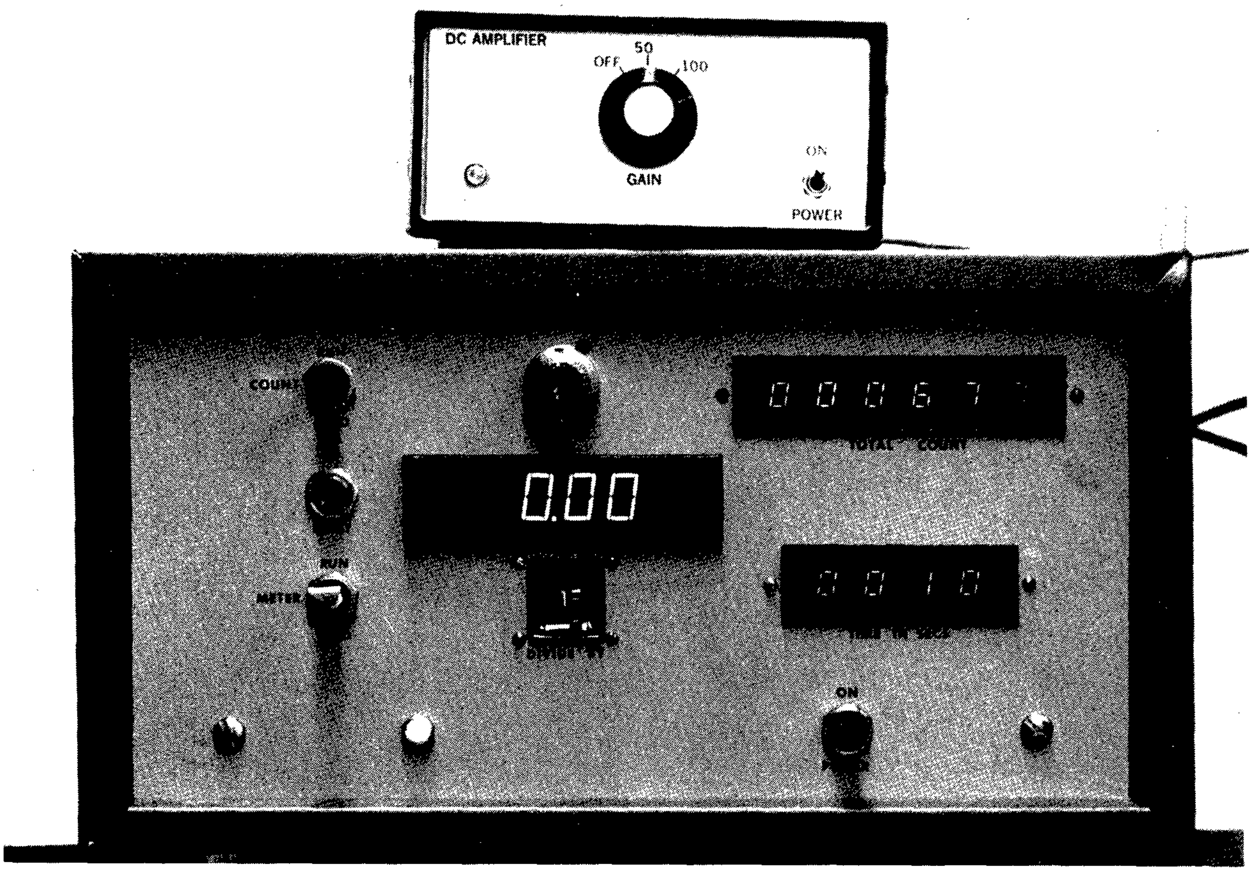


Figure 21. Voltage-to-frequency converter electronic integrator and DC buffer power amplifier.

Integrator Calibration

Before the integrator is calibrated, the subject dons a respirator and related protective equipment. While covering the respirator's aluminum sampling port (Fig. 10-b) with the index finger, the subject enters the interlock compartment of the test booth (Fig. 22) and closes the door. The subject then enters the actual test booth and closes the door. If the respirator requires a special intercom connection or an external source of breathing gas, the subject should connect it to the respirator at this time (Fig. 23). The subject then connects the open end of the respirator leakage sampling hose (Fig. 23) to the respirator's aluminum sampling port and sits quietly until the integrator calibration procedure is accomplished. The following steps are required to calibrate the integrator:

1. Check that the "SAMPLE" select switch is set to "CLEAR," and that the "RANGE SWITCH" is set to the ".01%" position (Fig. 8).

2. Check that the strip-chart recorder pen tracks a stable baseline, and record the associated voltage from the integrator's display (Fig. 21).

3. Toggle the integrator "COUNT" switch to the "RUN" position (Fig. 21).

4. Release the black lock-button on the integrator's "ZERO"-adjust control knob (Fig. 21). Rotate the control so that the integrator's counter increments for small transient voltage fluctuations (+0.01 volts) above the voltage magnitude recorded in Step 2. Lock the "ZERO"-adjust control into position using the black lock-button.

5. Toggle the integrator "COUNT" switch to the "HOLD" position (Fig. 21).

6. Depress the "RESET" button (Fig. 21) to clear the "TOTAL COUNT" and "TIME IN SECS" displays.

7. Set the "RANGE SWITCH" to "100%," and the "SAMPLE" select switch "UPSTREAM" (Fig. 8).

8. Allow the booth challenge concentration to stabilize, and record the associated voltage from the integrator's display (Fig. 21).

9. Set the "SAMPLE" select switch to "CLEAR," slowly move the "RANGE SWITCH" through its range positions (large to small values), and stop at the ".01%" position (Fig. 8).

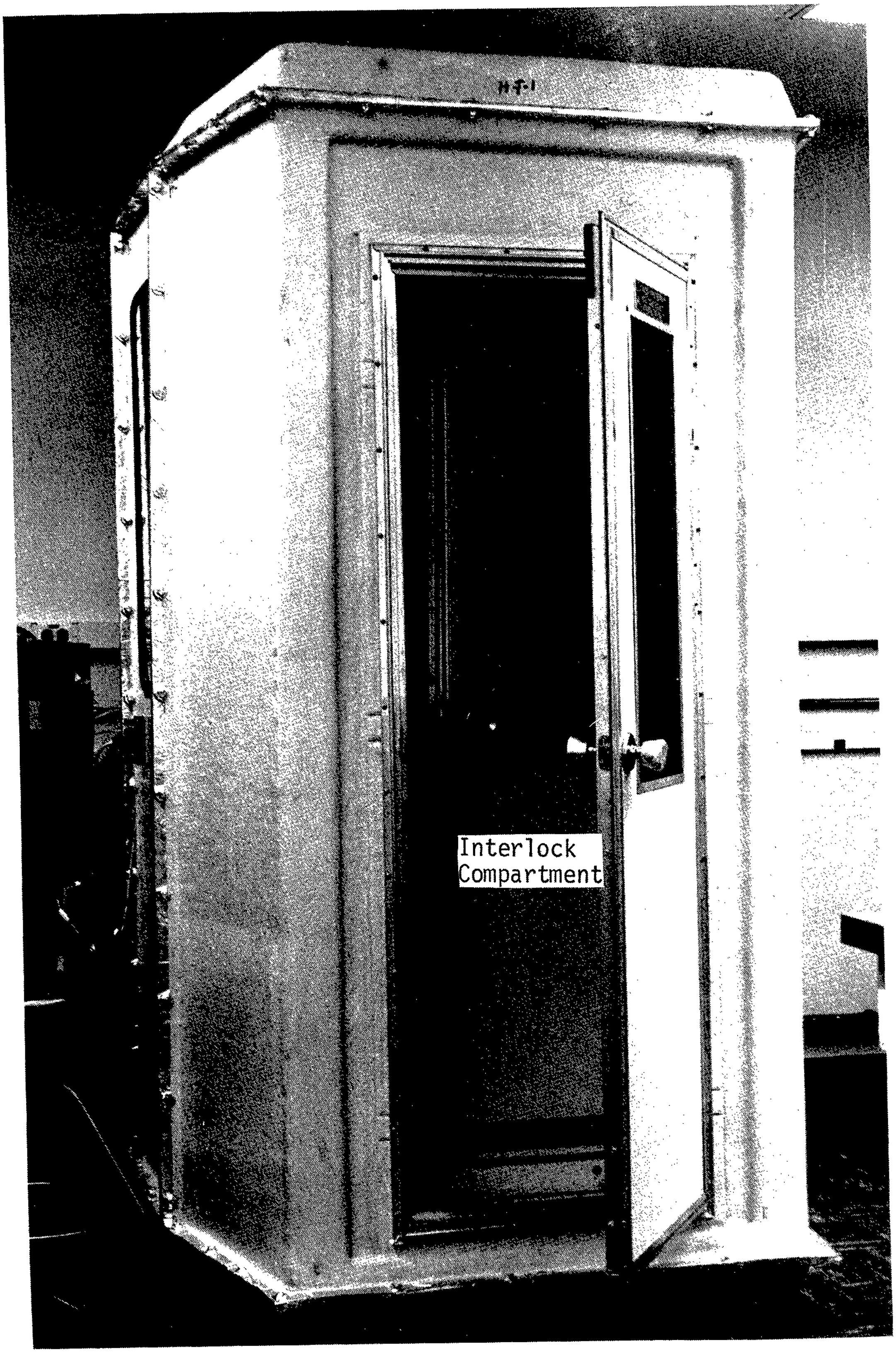


Figure 22. Test booth showing interlock compartment.

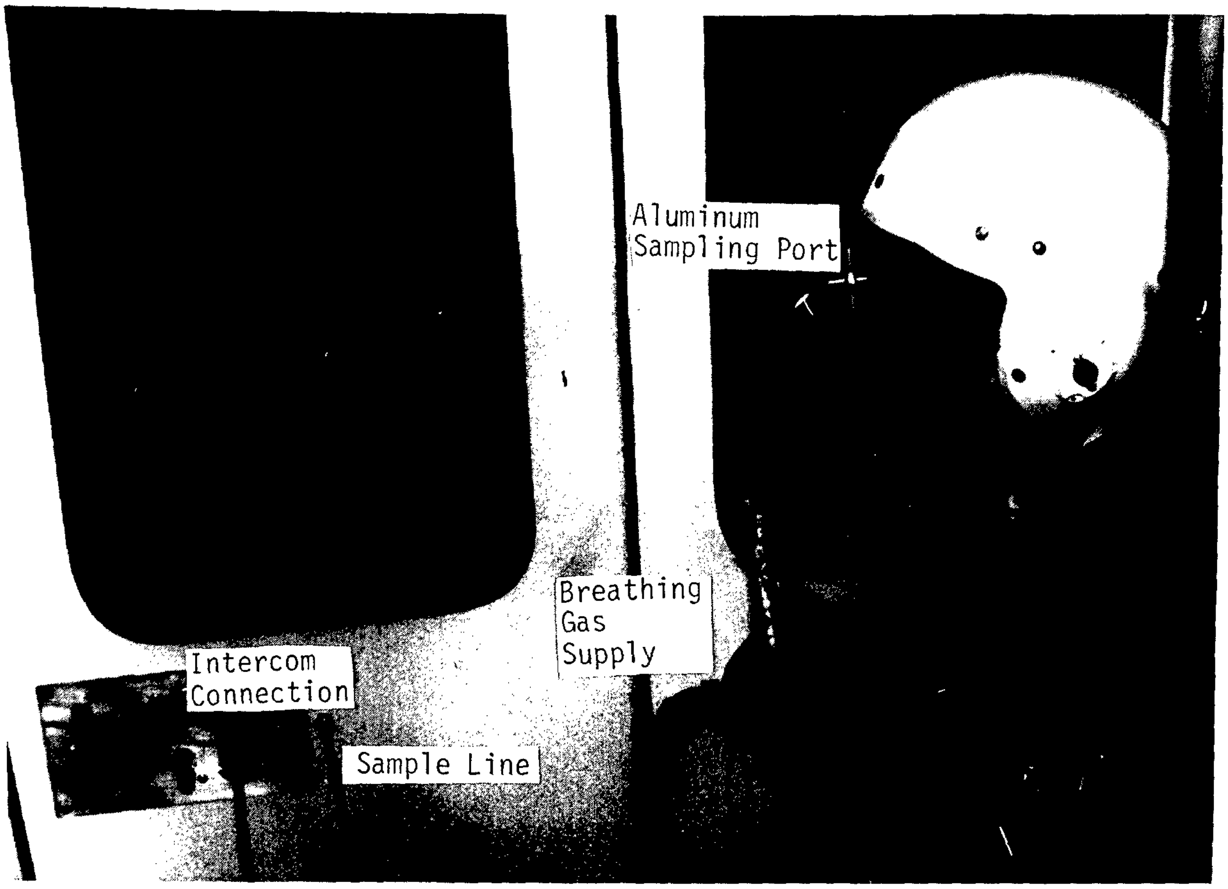


Figure 23. Test subject in flight suit and MBU-13/P respirator.

Respirator Evaluation

After the integrator has been calibrated, the subject performs the set of head-movement and breathing exercises--each for a predetermined time period--under the direction of the RQFT operator. The elapsed time and integrator count for each exercise are recorded. After the respirator evaluation has been completed, the subject sits quietly while the RQFT operator implements the following postcalibration procedure:

1. Check that the "SAMPLE" select switch is set to "CLEAR," and the "RANGE SWITCH" is set to the ".01%" position (Fig. 8).

2. Check that the strip-chart recorder pen tracks a stable baseline, and record the associated voltage from the integrator's display (Fig. 21).

3. Set the "RANGE SWITCH" to the "100%" position, and the "SAMPLE" select switch to "UPSTREAM" (Fig. 8).

4. Allow the booth challenge concentration to stabilize (strip-chart recorder pen plateaus), and record the associated voltage from the integrator's display (Fig. 21).

5. Set the "SAMPLE" select switch to "CLEAR," slowly move the "RANGE SWITCH" through its range positions (large to small values), and stop at the ".01%" position (Fig. 8).

Step 5 completes the RQFT, and the subject should disconnect the respirator leakage sampling hose and cover the open end of the aluminum sampling tube with the index finger. If the respirator required an intercom connection or an external source of breathing gas, it should also be disconnected from the respirator at this time (Fig. 23). The subject exits the inner test booth, closes the door, exits the interlock compartment (Fig. 22), and then closes the door.

Shutdown Procedure

Having completed all respirator quantitative fit testing, the operator should implement the following shutdown procedure:

1. Raise the strip-chart recorder pen from the paper, by means of the displacement lever (Fig. 16).

2. Toggle the strip-chart recorder's power switch (Fig. 16) to the "OFF" position.

3. Set the strip-chart recorder's paper speed control to "PWR OFF" (Fig. 16).

4. Toggle the integrator's power supply switch to the off position (Fig. 21).

5. Toggle the "LAMP" switch (Fig. 8) to the "OFF" position.

6. Toggle the "FLOW CONTROL" switch (Fig. 8) to the "OFF" position.

7. Toggle the test booth's FAN switch (Fig. 6) to the "OFF" position.

8. Toggle the "DILUTION AIR" blower's switch (Fig. 8) to the "OFF" position.

9. Turn off the compressed air regulator (Fig. 19).

10. Toggle the "POWER" switch (Fig. 8) to the "OFF" position.

Data Processing

The data recorded during respirator evaluation can be analyzed and reduced using the USAFSAM VAX-11/780 computer. The operator enters the data into the computer using a CRT terminal, and the output is a composite set of PF's that characterize the respirator fit and performance.

DATA COLLECTION AND REDUCTION

During respirator quantitative fit testing, a strip-chart recorder and an electronic integrator measure respirator performance. The RQFT data obtained from the integrator is reduced by use of the USAFSAM VAX-11/780 computer. The result is a composite set of protection factors.

Protection Factor

A respirator PF is defined as: the ratio of the DEHP concentration of the ambient challenge atmosphere external to the respiratory protective device to the concentration of the sample air drawn from the interior of the respirator. A PF can be mathematically expressed as:

$$PF = \frac{C_a}{C_s} \qquad (2)$$

where PF = protection factor

C_a = ambient challenge atmosphere concentration

C_s = sampled leakage concentration

A protection factor is a dimensionless quantity; the units of the concentrations cancel in the ratio.

An arithmetic average protection factor, ($\overline{PF}$), is calculated for the series of breathing and head movement exercises. Mathematically, it can be expressed as:

$$\overline{PF} = \frac{\sum_{i=1}^{n} PF_i}{n} \qquad (3)$$

where $\overline{PF}$ = average protection factor for n exercises

i = the ith exercise, i = 1, 2, 3, ..., n

PF = protection factor associated with a specific exercise

An average weighted protection factor is calculated to assign greater or lesser degrees of relative importance to individual exercise PF's. The time-weighted average protection factor is calculated when specific exercises are accomplished for different lengths of time. A mathematical relationship for a time-weighted average protection factor is:

$$\overline{PF}_W = \frac{\sum_{i=1}^{n} W_i PF_i}{\sum_{i=1}^{n} W_i} \qquad (4)$$

where $\overline{PF}_W$ = weighted average protection factor for n exercises

i = the ith exercise, i = 1, 2, 3, ..., n

w_i = weighting factor for the ith exercise (time)

PF = protection factor associated with a particular exercise

Strip-chart Recorder

The penetration or leakage of the challenge atmosphere into a respirator during quantitative fit testing is continuously displayed on a strip-chart recorder (Fig. 16). The strip-chart recorder data can be used to calculate the protection factors manually. Shown in Figure 24 is the strip-chart recorder output for a typical quantitative fit test, as well as the DEHP instrument calibration data and penetration information for a set of 6 exercises that were evaluated for a 10-sec period:

1. normal breathing looking straight ahead (NB)
2. deep breathing looking straight ahead (DB)
3. deep breathing and turning head side-to-side (TH)
4. deep breathing and moving head up-and-down (UD)
5. talking (T)
6. facial grimacing (FG)

The analysis of Figure 24 begins, at the bottom of the strip-chart recording, with: identification of the subject's name, respirator type, and date/time for the test. Next, the DEHP instrument calibration is displayed.

This information includes a steady-state response for the ambient DEHP challenge aerosol concentration in the test booth and a steady-state baseline response [2]. After the subject has entered the test booth, and before the test exercises begin, the test calibration measurements associated with the maximum booth challenge concentration and the baseline are made. The recordings for the 6 exercises follow in sequence, each being performed for a predetermined time period. After the exercise set has been completed, and before the subject exits the test booth, the final measurements associated with the baseline and the booth challenge concentration are made.

During an exercise, as the subject inhaled, a slight negative pressure was created in the facepiece, thus increasing the penetration of the challenge atmosphere into the respirator. The strip-chart recorder responded by recording a peak. In turn, a slight positive pressure was created during exhalation, thus reducing the penetration of the challenge atmosphere into the respirator. Hence, a valley was recorded by the strip-chart recorder. Respirator performance is based on the average of the penetration peaks and valleys recorded during each exercise [2,3,4].

Strip-chart recorder data can be analyzed and reduced manually to calculate a composite set of protection factors. A series of dashed lines are drawn through the visual average of the strip-chart recording peaks and valleys associated with the individual calibration and exercise measurements. Summarized in Table 1 are the averages identified for the strip-chart recording in Figure 24 [2]. The equation used to determine a protection factor for an exercise is [2]:

$$PE_X = \left[\frac{(C_i + C_f)(K_{cc}) - (B_i + B_c)(K_{bc})}{2} \right] \div \left[(RE_X)(KE) - \frac{(B_i + B_f)(K_{bc})}{2} \right] \qquad (5)$$

where PF_X = protection factor for a particular exercise X, for x = {NB, DB, TH, UD, T, or FG}

C_i = initial ambient test booth challenge concentration

C_f = final ambient test booth challenge concentration

K_{cc} = instrument's sampling range switch position (typically 100 percent)

B_i = initial baseline concentration

B_f = final baseline concentration

K_{bc} = instrument's sampling range switch position (typically 10 - 0.01 percent)

RE_X = average respirator sampled leakage determined from a strip-chart recording for a particular exercise x, for x = {NB, DB, TH, UD, T, or FG}

KE = instrument's sampling range switch position used during the exercise measurement time period (typically 10 - 0.01 percent)

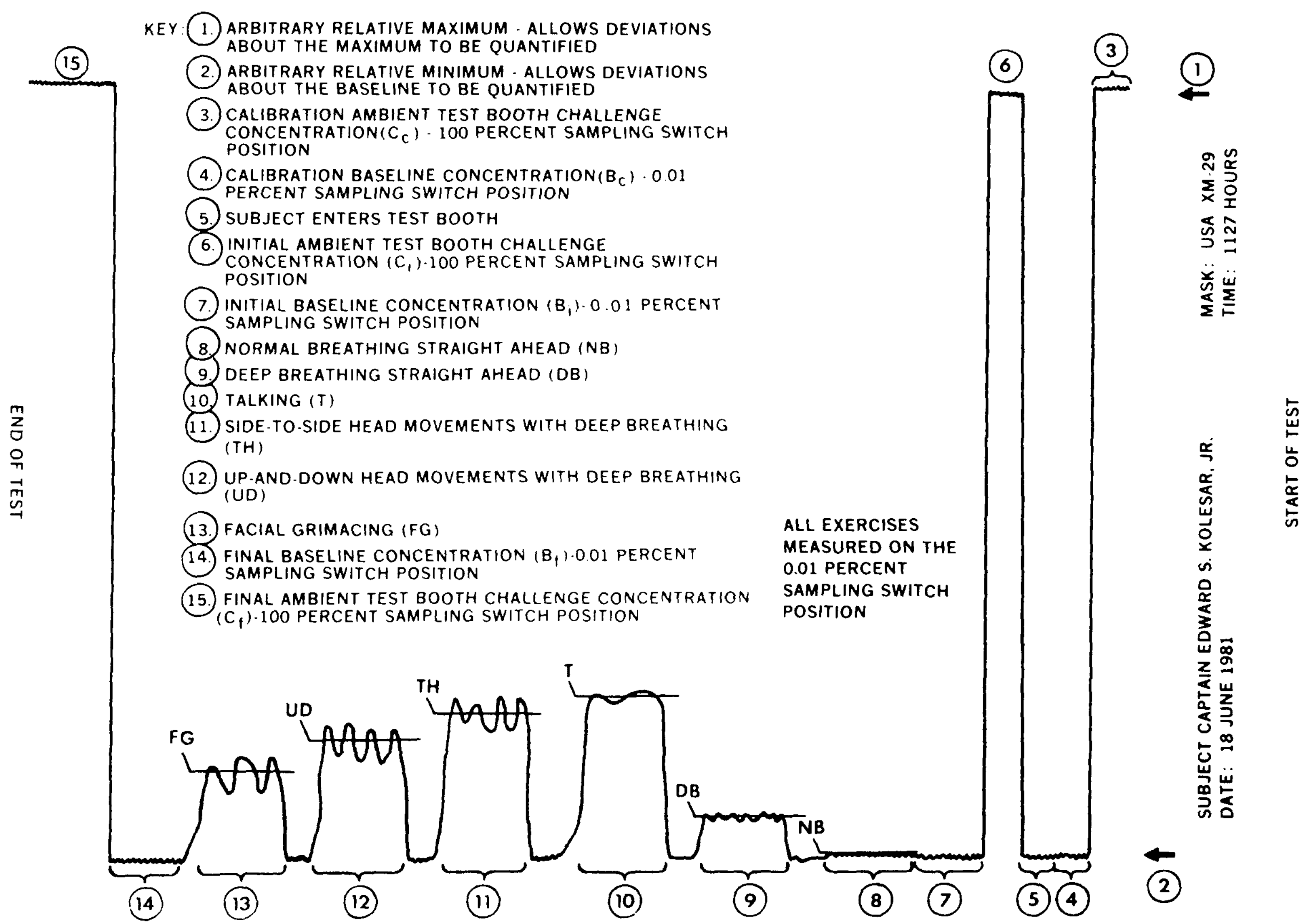


Figure 24. Strip-chart recording of a di-2-ethylhexyl phthalate respirator quantitative fit test.

TABLE 1. QUANTITATIVE FIT TEST STRIP-CHART RECORD

Parameter	Average strip-chart recorder value for a 0-100 Scale	Sampling range switch position (as a percent)
Calibration ambient test booth challenge concentration (C_c)	95.0	100.0
Calibration baseline concentration (B_c)	5.2	0.01
Initial ambient test booth challenge concentration (C_i)	94.25	100.0
Initial baseline concentration (B_i)	5.2	0.01
Normal breathing (RE_{NB})	5.5	0.01
Deep breathing (RE_{DB})	1.0	0.01
Turning head side-to-side with deep breathing (RE_{TH})	2.4	0.01
Moving head up-and-down with deep breathing (RE_{UD})	2.2	0.01
Talking (RE_T)	1.9	0.01
Facial grimacing (RE_{FG})	1.5	0.01
Final baseline concentration (B_f)	5.25	0.01
Final ambient test booth challenge concentration (C_f)	95.5	100.0

Equation 5 can be rewritten as:

$$PF_x = \left[\frac{C_{cor}}{RE_{(cor,x)}} \right]$$

where

PF_x = protection factor for a particular exercise x, for x = {NB, DB, TH, UD, T, or FG}

C_{cor} = average corrected test booth ambient challenge concentration

$RE_{(cor,x)}$ = average corrected respirator sampled leakage for a particular exercise x, for x = {NB, DB, TH, UD, T, or FG}

The PFs for the data presented in Table 1 (derived from the strip-chart recording in Fig. 24) are shown in Table 2 [2].

The manual method of calculating protection factors can be very cumbersome. Therefore, an automated method of calculating PFs has been developed, utilizing the USAFSAM VAX 11/780 computer and an electronic integrator. This automated scheme permits RQFT data to be reduced in approximately one-fifth the time required for manual calculations (4 min vs. 20 min) [2].

Voltage-to-Frequency Converter Electronic Integrator

The voltage-to-frequency (V/F) converter electronic integrator (Fig. 21) transforms the analog strip-chart recorder signal into a pulse train whose repetition rate (frequency) is a direct function of the strip-chart recorder's response [12]. A counter stage is added to the V/F converter's output to accumulate the pulses. The accumulated pulse count is equal to the "area under the strip-chart recorder's voltage curve," or time-averaged integral [4].

The DEHP RQFT instrument was modified to accommodate the V/F integrator concept. The particular V/F integrator design requires an input analog direct-current voltage signal (strip-chart recorder input signal) spanning approximately 0 - 10 volts, and the current-to-voltage operational amplifier circuit in the DEHP RQFT instrument generates an analog output signal spanning 0 - 100 millivolts. Therefore, a buffer power amplifier (Biomedical Engineering File No. 81-15, USAFSAM, Brooks AFB, TX 78235) was designed (Fig. 21) to make the DEHP RQFT instrument's output signal compatible with the integrator. For optimum performance (maximized stability and minimized noise), the buffer power amplifier requires a gain ranging from 50 to 70. This gain range amplified the DEHP RQFT instrument's strip-chart recorder signal to span approximately 0 to 6 ± 1 volts. A schematic of the buffer power amplifier is shown in Figure 25 [2].

The USAFSAM DEHP RQFT V/F integrator is very simple to operate. The Analog Devices AD450J V/F converter transforms the PMT's analog voltage signal into a pulse train which is accumulated and recorded on the 6-digit LED integrator count display (Fig. 21). When signals must be integrated longer than 15 min, an integrator count dividing constant is selected to keep the integrator count from overloading. The dividing constant (digits 1-9) is selected by the operator using the thumb wheel "DIVIDE BY" switch on the integrator's front panel (Fig. 21). The magnitude of the integrator count digital display must be multiplied by the switch position number to obtain the actual integrator count. The integrator also features an internal time base generator (Motorola Semiconductor Products, Model MC14566 integrated circuit, Phoenix, AZ 85036). A clocked output pulse is produced each second, and the accumulated time (in seconds) is registered on the 4-digit LED display (Fig. 21). The operator has complete control over the length of time a signal is integrated with the integrator's "COUNT" switch and "RESET" button (Fig. 21). The "COUNT" switch is toggled to the "RUN" position to start the time and integrator counts, and toggled to the "HOLD" position to stop the counters when an exercise has been completed. The "RESET" button is depressed to clear the time and integrator count displays to zero for the next exercise. Manual control of the integrator permits the operator to start and stop the counters as desired, and allows the integrator count and time to be recorded for that exercise [3,4].

Data Collection

RQFT data is generated and displayed on the V/F integrator's LED displays and strip-chart recorder. After the subject enters the test booth and makes the appropriate connections to the sampling line, breathing gas supply, and intercom, then the subject's name, respirator type, date, and time are entered on the appropriate data collection form (Figs. 26 and 27). Prior to initiating the first test exercise, the measurement of the average initial voltage associated with the maximum test booth challenge concentration is made. This voltage is displayed on the digital voltmeter on the V/F integrator's front panel (Fig. 21). This steady-state voltage and the associated sampling range switch position are recorded on the data collection form. Next, the average initial voltage associated with the baseline is determined and recorded along with the corresponding sampling range switch position. The subject then performs the set of 6 or 16 exercises, each for a predetermined time period. After each exercise is accomplished, the integrator count and elapsed time display on the V/F integrator's front panel, and the DEHP instrument's sampling range switch position are recorded on the data collection form. Shown in Figure 26 is the 6-exercise protocol; and, in Figure 27, the 16-exercise protocol.

TABLE 2. QUANTITATIVE FIT TEST PF RECORD

Exercise	PF
Normal breathing looking straight ahead	1.0×10^{6} [a]
Deep breathing looking straight ahead	2.0×10^{5}
Deep breathing and turning head side-to-side	5.1×10^{4}
Deep breathing and moving head up-and-down	5.7×10^{4}
Talking	6.9×10^{4}
Facial grimacing	9.5×10^{4}

Overall $\overline{PF} = 2.5 \times 10^{5}$

[a] NOTE: Protection factors calculated to be greater than 1.0×10^{6} are reported as 1.0×10^{6}, because the instrument's sensitivity is limited to measuring PF's of 1.0×10^{6}.

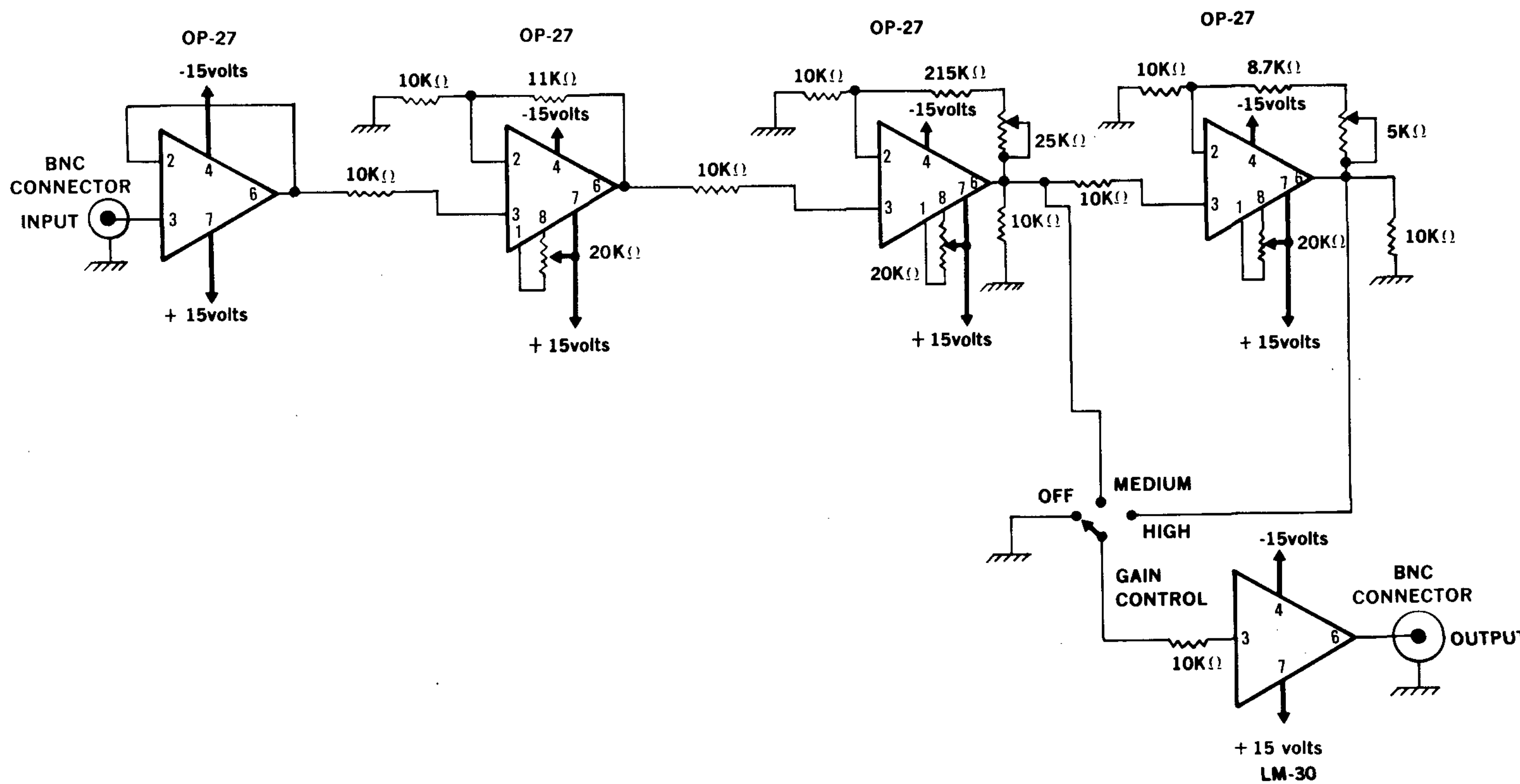


Figure 25. Di-2-ethylhexyl phthalate buffer power amplifier circuit.

DEHP RQFT DATA

SUBJECT NAME: ______________________
TYPE OF RESPIRATOR: ______________________
DATE TESTED: ______________________
TIME TESTED: ______________________

DEHP RQFT CALIBRATION DATA:

CALIBRATION PARAMETER	SAMPLING RANGE SWITCH POSITION (AS A PERCENT)	AVERAGE VOLTAGE (IN VOLTS)
AVERAGE INITIAL VOLTAGE ASSOCIATED WITH THE MAXIMUM CHAMBER CHALLENGE CONCENTRATION		
AVERAGE INITIAL VOLTAGE ASSOCIATED WITH THE BASELINE OF THE DEHP RQFT INSTRUMENT		
AVERAGE FINAL VOLTAGE ASSOCIATED WITH THE BASELINE OF THE DEHP RQFT INSTRUMENT		
AVERAGE FINAL VOLTAGE ASSOCIATED WITH THE MAXIMUM CHAMBER CHALLENGE CONCENTRATION		

EXERCISE INTEGRATOR COUNT INFORMATION:

EXERCISE	INTEGRATOR COUNT	TIME PERIOD (IN SECONDS)	SAMPLING RANGE SWITCH POSITION (AS A PERCENT)
NORMAL BREATHING STRAIGHT AHEAD			
DEEP BREATHING STRAIGHT AHEAD			
TALKING			
SIDE-TO-SIDE HEAD MOVEMENTS (DEEP BREATHING)			
UP-AND-DOWN HEAD MOVEMENTS (DEEP BREATHING)			
FACIAL GRIMACING			

Figure 26. Data collection sheet for six-exercise protocol.

DEHP RQFT DATA

SUBJECT NAME: ____________________
TYPE OF RESPIRATOR: ____________________
DATE TESTED: ____________________
TIME TESTED: ____________________

DEHP RQFT CALIBRATION DATA:

CALIBRATION PARAMETER	SAMPLING RANGE SWITCH POSITION (AS A PERCENT)	AVERAGE VOLTAGE (IN VOLTS)
AVERAGE INITIAL VOLTAGE ASSOCIATED WITH THE MAXIMUM CHAMBER CHALLENGE CONCENTRATION		
AVERAGE INITIAL VOLTAGE ASSOCIATED WITH THE BASELINE OF THE DEHP RQFT INSTRUMENT		
AVERAGE FINAL VOLTAGE ASSOCIATED WITH THE BASELINE OF THE DEHP RQFT INSTRUMENT		
AVERAGE FINAL VOLTAGE ASSOCIATED WITH THE MAXIMUM CHAMBER CHALLENGE CONCENTRATION		

EXERCISE INTEGRATOR COUNT INFORMATION:

EXERCISE	INTEGRATOR COUNT	TIME PERIOD (IN SECONDS)	SAMPLING RANGE SWITCH POSITION (AS A PERCENT)
NORMAL BREATHING STRAIGHT AHEAD			
NORMAL BREATHING LEFT			
NORMAL BREATHING RIGHT			
NORMAL BREATHING DOWN			
NORMAL BREATHING UP			
DEEP BREATHING STRAIGHT AHEAD			
DEEP BREATHING LEFT			
DEEP BREATHING RIGHT			
DEEP BREATHING DOWN			
DEEP BREATHING UP			
TALKING			
FACIAL GRIMACING			
SIDE-TO-SIDE HEAD MOVEMENTS (NORMAL BREATHING)			
UP-AND-DOWN HEAD MOVEMENTS (NORMAL BREATHING)			
SIDE-TO-SIDE HEAD MOVEMENTS (DEEP BREATHING)			
UP-AND-DOWN HEAD MOVEMENTS (DEEP BREATHING)			

Figure 27. Data collection sheet for sixteen-exercise protocol.

Computer Calculations

Processing RQFT data by means of the V/F integrator-computer algorithm scheme has three primary advantages. First, this scheme can resolve smaller voltage fluctuations than would be possible with the manual method of calculating PF's. Second, the scheme eliminates the human error and the variability associated with reading and interpolating strip-chart recordings--and, third, reduces by approximately 20 percent the time required to process RQFT data [2].

The actual calculation of PF's is accomplished by the computer using an equation similar to that used for manual computations (Eq. 5). Since a one-to-one correspondence exists between the scattered-light photometer's output voltage and the sampled concentration of DEHP, then:

$$\overline{V}\ \text{volts} = \frac{\text{Integrator Count}}{(1000)(\text{time in sec})} \tag{7}$$

The equation for calculating PF's can be rewritten as:

$$PE_x = \left[\frac{(VC_i + VC_f)(K_{cc}) - (VB_i + VB_f)(K_{bc})}{2}\right] \div \left[(VRE_x)(KE) - \frac{(VB_i + B_f)(K_{bc})}{2}\right] \tag{8}$$

where

VC_i = average initial voltage response associated with the test booth challenge concentration (corresponds to C_i)

VC_f = average final voltage response associated with the test booth challenge concentration (corresponds to C_f)

K_{cc} = instrument's sampling range switch position (typically 100 percent)

VB_i = average voltage response associated with the initial baseline concentration (corresponds to B_i)

VB_f = average voltage response associated with the final baseline concentration (corresponds to B_f)

K_{bc} = instrument's sampling range switch position (typically 10 - 0.01 percent)

VRE_x = average voltage response associated with the average respirator sampled leakage determined from the integration count for a particular exercise x, for x = {NB, DB, TH, UD, T, or FG}

KE = instrument's sampling range switch position used during the exercise measurement time period (typically 10 - 0.01 percent) [1,2]

The computer uses the information collected on the RQFT data collection form, and calculates a composite set of PF's by means of equation 8. The V/F integrator data associated with Figure 24 and Table 1 are shown in Table 3; and the computer calculated results, in Table 4. The results obtained by manual calculation and those by computer calculation are very similar (Tables 2 and 4).

TABLE 3. INTEGRATOR COUNT DATA FOR THE STRIP-CHART RECORDING IN FIGURE 24

DEHP RQFT DATA

SUBJECT NAME: CAPTAIN EDWARD S. KOLESAR, JR.
TYPE OF RESPIRATOR: USA XM-29; MEDIUM; NO GLASSES
DATE TESTED: 18 JUNE 1981
TIME TESTED: 1127 HRS

DEHP RQFT CALIBRATION DATA:

CALIBRATION PARAMETER	SAMPLING RANGE SWITCH POSITION (AS A PERCENT)	AVERAGE VOLTAGE (IN VOLTS)
AVERAGE INITIAL VOLTAGE ASSOCIATED WITH THE MAXIMUM CHAMBER CHALLENGE CONCENTRATION	100.00	5.820
AVERAGE INITIAL VOLTAGE ASSOCIATED WITH THE BASELINE OF THE DEHP RQFT INSTRUMENT	0.01	0.090
AVERAGE FINAL VOLTAGE ASSOCIATED WITH THE BASELINE OF THE DEHP RQFT INSTRUMENT	0.01	0.050
AVERAGE FINAL VOLTAGE ASSOCIATED WITH THE MAXIMUM CHAMBER CHALLENGE CONCENTRATION	100.00	5.800

EXERCISE INTEGRATOR COUNT INFORMATION:

EXERCISE	INTEGRATOR COUNT	TIME PERIOD (IN SECONDS)	SAMPLING RANGE SWITCH POSITION (AS A PERCENT)
NORMAL BREATHING STRAIGHT AHEAD	131	10	0.01
DEEP BREATHING STRAIGHT AHEAD	3757	10	0.01
TALKING	11871	10	0.01
SIDE-TO-SIDE HEAD MOVEMENTS (DEEP BREATHING)	11074	10	0.01
UP-AND-DOWN HEAD MOVEMENTS (DEEP BREATHING)	8997	10	0.01
FACIAL GRIMACING	6752	10	0.01

TABLE 4. PROTECTION FACTOR COMPUTER PROGRAM CALCULATIONS FOR THE DATA IN TABLE 3

THE DESCRIPTIVE AND PROTECTION FACTOR CALCULATIONS

SUBJECT NAME: CAPTAIN EDWARD S. KOLESAR, JR.
TYPE OF RESPIRATOR: USA XM-29; MEDIUM; NO GLASSES
DATE TESTED: 18 JUNE 1981
TIME TESTED: 1127 HRS

EXERCISE	PROTECTION FACTOR
NORMAL BREATHING STRAIGHT AHEAD	1.0E+06
DEEP BREATHING STRAIGHT AHEAD	1.9E+05
TALKING	5.2E+04
SIDE-TO-SIDE HEAD MOVEMENTS (DEEP BREATHING)	5.6E+04
UP-AND-DOWN HEAD MOVEMENTS (DEEP BREATHING)	7.0E+04
FACIAL GRIMACING	9.6E+04

OVERALL ARITHMETIC AVERAGING PROTECTION FACTOR
FOR ALL CATEGORIES OF EXERCISES ACTUALLY PERFORMED = 2.4E+05

OVERALL TIME WEIGHTED AVERAGE PROTECTION FACTOR
FOR ALL CATEGORIES OF EXERCISES ACTUALLY PERFORMED = 2.4E+05

NOTE: Any protection factor that is listed as 1.0E+06 has been assigned this value by default because the sensitivity of the RQFT instrument is, at most, one part in ten of the sixth. The integrator count value for a particular exercise in question is merely representative of integrating the electrical noise, and the true protection factor is indeed greater than 1.0E+06. Any exercise-scaled integrator count value yielding a protection factor greater than 1.0E+06 will be reported as 1.0E+06.

MAINTENANCE

Daily and periodic maintenance of the DEHP RQFT system is necessary to insure reliable operation.

Prior to implementing the startup procedure for the DEHP RQFT instrument, the impactor must be drained of residual DEHP, and the DEHP level in the generator reservoir should be filled to within 0.375 in. (0.953 cm) above the base of the site glass (Fig. 4). (The impactor drain valve (Fig. 4) must be closed before implementing the startup procedure.)

After the DEHP RQFT system has been turned on and allowed to stabilize, the system is calibrated using the procedure in the "DEHP Instrument Calibration" section. If this procedure does not result in a reproducible zero baseline, the following should be checked [1]:

1. leaks in the aerosol generation, dilution, or sampling systems
2. "GAIN" control (Fig. 8) set too high
3. contaminated scattered-light photometer cell

If these possibilities prove to be negative, other contributing factors that should be checked include [1]:

1. stray-light leaks
2. an aging incandescent lamp (Figs. 15 and 28)
3. a faulty vacuum system
4. a gassy PMT (Figs. 15 and 28)
5. poor lamp contact (Figs. 15 and 28)

If an unstable booth challenge concentration cannot be established, the following items should be checked [1]:

1. improper liquid level in DEHP generator reservoir (Fig. 4)
2. DEHP in aerosol impactor can (Fig. 4)
3. improper sampling flow rate (Fig. 8)

Incandescent Lamp Aging

The incandescent lamp may have to be replaced. If an unstable zero baseline exists and one is certain that the DEHP RQFT system has been properly calibrated and the other system components are functional, the incandescent lamp should be replaced. For optimum performance of the DEHP RQFT system, the incandescent lamp should be routinely replaced after 100 hours of operational use [1].

Cleaning the Light-Scattering Chamber

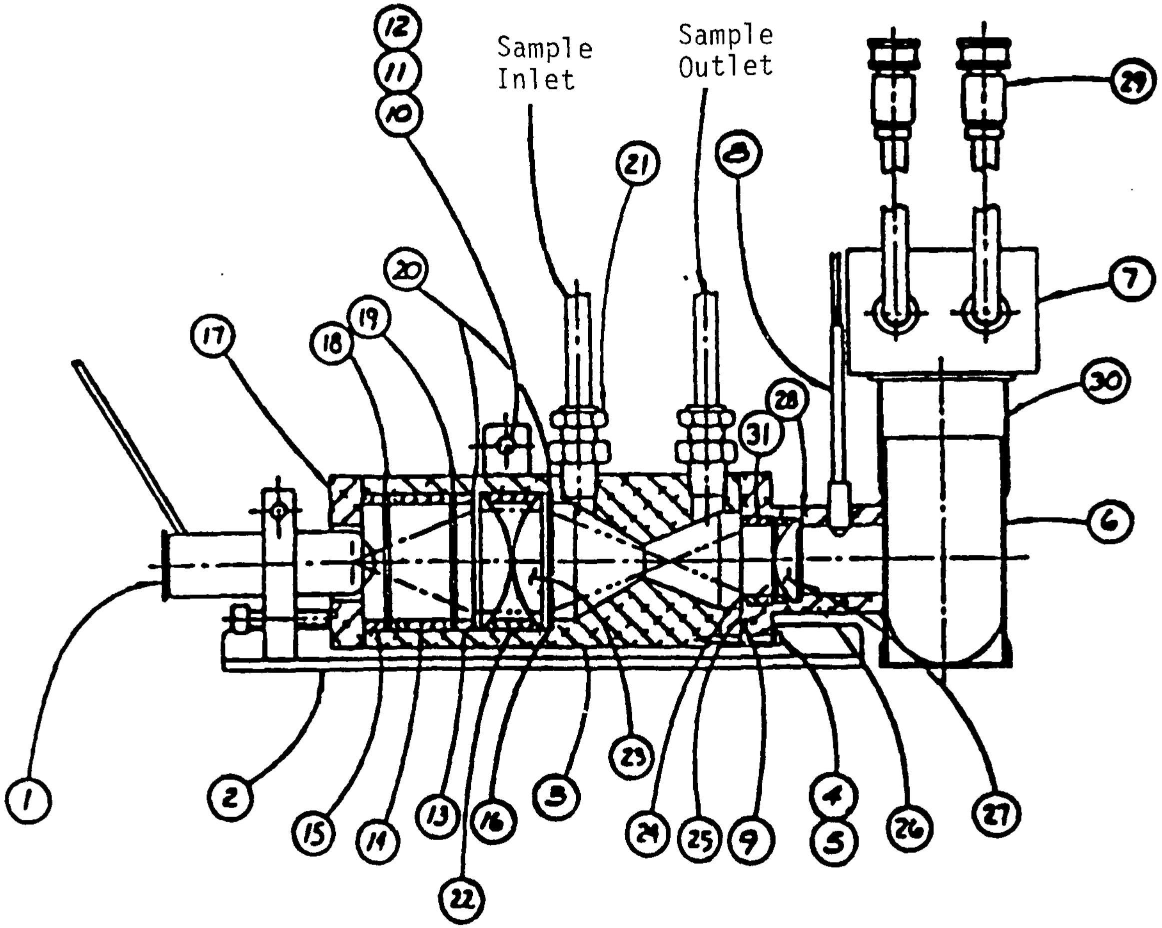
After long-term use of the RQFT instrument for measuring high concentrations of respirator leakage (typically PF's of 1000 or less), cleaning the light-scattering chamber may be necessary. The surfaces of the lens and inner surfaces of the chamber (from the lens area to the flange area) may become contaminated with DEHP (Fig. 28). The chamber and lens must be thoroughly cleaned and dried before respirator fit testing can be resumed [1].

Chamber Removal

1. Check that the "POWER," "LAMP," and "FLOW CONTROL" switches (Fig. 8) are in their "OFF" position. Disconnect the a.c. power cord.
2. Remove light-scattering chamber mounting base from the chassis (Fig. 28).
3. Disconnect the coax cables from the PMT's housing (Fig. 28).
4. Disconnect the calibration and chamber lamp leads from the terminal board and mark the leads (Fig. 28).
5. Disconnect the sample inlet and sample outlet lines (Fig. 28).
6. Remove the chamber from the chassis (Fig. 28) [1].

Chamber Cleaning (Fig. 28)

1. Remove the clamp assembly holding the light-scattering chamber to its mounting base.
2. Remove the PMT assembly.
3. Disassemble the rear section of the chamber.
4. Wipe all components with isopropyl alcohol and a clean cloth.
5. Insure that the lens surfaces are free of fingerprints.
6. Reassemble the rear section of the chamber.
7. Disassemble the front section of the chamber.
8. Wipe all components with isopropyl alcohol and a clean cloth.
9. Assure that the inside surface of the chamber and surfaces of the components (excluding the lens, gasket, and "O" ring) are ultra flat black. To blacken, paint with ultra flat black paint, or use the smoke generated from burning a wick dipped in oil of camphor.
10. Reassemble the front section of the chamber [1].



Key	Description
1	LAMP ASSEMBLY
2	MOUNTING ASSEMBLY
3	CHAMBER ASSEMBLY
4	PAN HEAD SCREW
5	LOCK WASHER
6	PMT OPTICS
7	PMT SOCKET
8	CALIBRATION LAMP
9	O-RING
10	PAN HEAD SCREW
11	LOCK WASHER
12	HEX-NUT
13	SPACER NO. 1
14	SPACER NO. 2
15	SPACER NO. 3
16	RUBBER GASKET
17	END PLATE
18	STOP NO. 2
19	STOP NO. 1
20	APERTURE STOP
21	SAMPLE CONNECTION
22	OPTICAL CONDENSER
23	LENS
24	LIGHT STOP
25	PMT FLANGE
26	LENS
27	EXIT STOP
28	RUBBER GASKET
29	BNC CONNECTOR
30	PMT HOUSING
31	LIGHTSTOP/LENS RETAINER
32	THREADED RING

Figure 28: Part 1 (of 3). Light-scattering chamber assembly schematic.

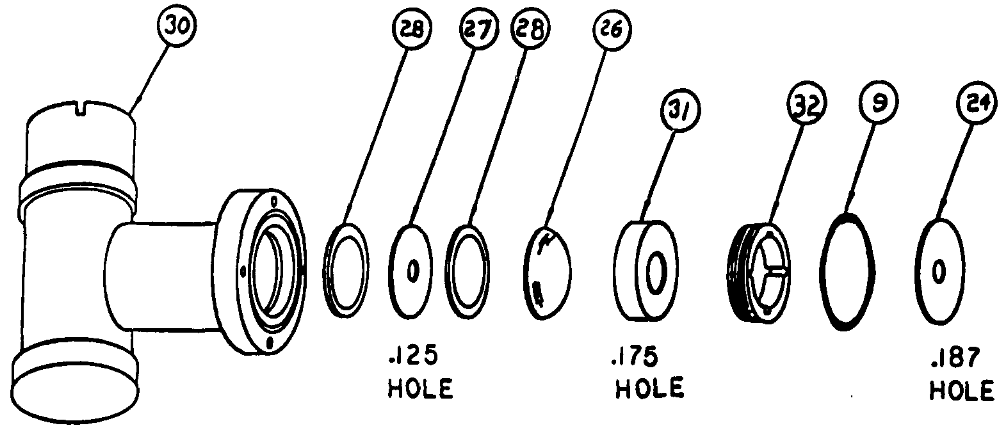


Figure 28: Part 2 (of 3). Light-scattering chamber assembly schematic. (For "Key," see facing page.)

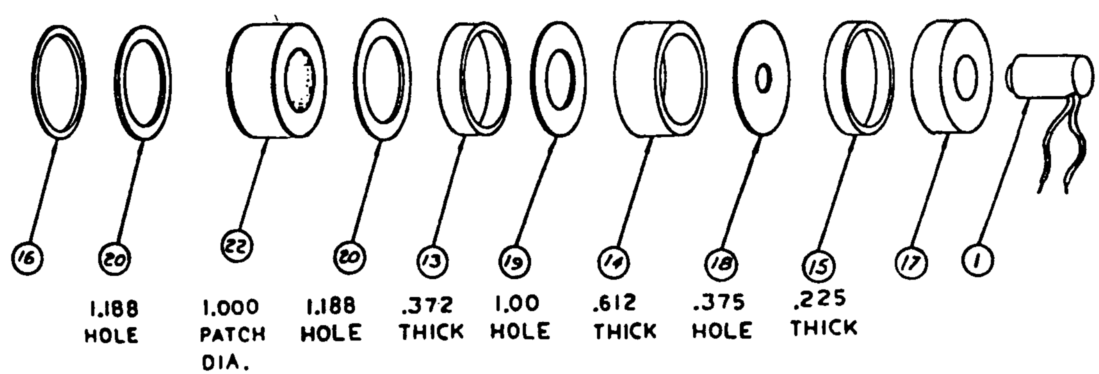


Figure 28: Part 3 (of 3). Light-scattering chamber assembly schematic. (For "Key," see facing page.)

Chamber Reinstallation (Fig. 28)

1. Reinstall the chamber base mount to the PMT housing and secure the chamber to the base using the clamp assembly.

2. Reinstall the PMT. Insure that the glass envelope of the tube is clean and free of fingerprints.

3. Reinstall the chamber in the chassis.

4. Reconnect the sample inlet and sample outlet lines.

5. Reconnect calibration and chamber lamp leads to the terminal board.

6. Reconnect coax cables to the PMT housing.

7. Reconnect the a.c. power cord [1].

Intensity Peaking of Chamber Lamp and Photomultiplier Tube

The light-scattering lamp and the PMT require adjustment to achieve maximum sensitivity (intensity peaking). Intensity peaking is necesssary after [1]:

1. Replacing the PMT

2. Replacing the chamber lamp

3. Removing and cleaning the chamber

4. Replacing the lamp's power supply.

To accomplish intensity peaking of the chamber lamp and PMT, the following procedure should be implemented [1]:

1. Initiate the DEHP RQFT instrument's startup procedure.

2. Set the "RANGE SWITCH" to its "100%" position, and toggle the "SAMPLE" select switch to "DOWNSTREAM" (Fig. 8).

3. Adjust the "GAIN" control (Fig. 8) until the meter (Fig. 8) indicates "50" percent penetration.

4. Loosen the chamber lamp (Fig. 15).

5. Adjust the in-line displacement of the lamp until the meter (Fig. 8) indicates a maximum percent penetration.

6. Rotate the lamp until the meter (Fig. 8) indicates a maximum percent penetration.

7. Lock the lamp in position.

8. Rotate the PMT (Figs. 15 and 28) until the meter indicates a maximum percent penetration.

9. Secure the PMT in position.

Filter Replacement

The DEHP RQFT instrument filters must be replaced routinely. The HEPA filter (Fig. 5) should be replaced if a stable reading cannot be established on the magnehelic gauge (Fig. 8) (about 300 operational hours). If a stable baseline cannot be maintained in the "clear" sample mode, the high-efficiency sample filter (Fig. 15) may need to be replaced (about 1000 operational hours). The PMT sample cell filter (Fig. 15) should be replaced before its red indicator band extends the length of the filter (about 3000 operational hours).

CONCLUSION

The USAFSAM DEHP RQFT instrument satisfies a need for a simple and rugged, yet sensitive and accurate tool for fitting respirators. This instrument's capability complements that of the USAFSAM's sodium chloride RQFT instrument. In addition, the DEHP RQFT instrument is used for industrial hygiene purposes in the U.S. Air Force (e.g., Strategic Air Command, Military Airlift Command, and Air Force Logistics Command).

The most significant achievement implemented by USAFSAM is the computer algorithm and electronic integrator that automates the collection and reduction of protection factor (PF) data. Also, a coarse-fine calibration potentiometer circuit was integrated into the instrument's stray-light function. This modification permits the operator to calibrate the instrument quickly and accurately. As a result of this work, the man-hour time savings per respirator fit trial has been reduced by more than 20%, and human mathematical errors have been eliminated.

REFERENCES

1. Dynatech Frontier Corporation. Polydispersed DOP aerosol system Model FE259H operating manual, Albuquerque, N. Mex., 18 Apr 1980.

2. Kolesar, E. S., Jr. Automated calculation of protection factors for the di-2-ethylhexyl phthalate respirator quantitative fit test instrument. SAM-TR-81-35, Dec 1981.

3. Kolesar, E. S., Jr. An automated method of calculating protection factors for the sodium chloride respirator quantitative fit test instrument. SAM-TR-80-50, Dec 1980.

4. Kolesar, E. S., Jr., and C. M. de la Barre. Sodium chloride respirator quantitative fit test instrument. SAM-TR-81-22, Nov 1981.

5. Hounam, R. F., D. J. Morgan, D. T. O'Conner, and R. J. Sherwood. The evaluation of protection provided by respirators. Am Occup Hyg J 7:353 (1964).

6. Hyatt, E. C., J. A. Pritchard, A. L. Hack, L. D. Wheat, T. O. Moore, C. P. Richards, and L. A. Geoffrion. Respirator research and development related to quality control. Progress Report LA-4933-PR. (Project R-037). Los Alamos Scientific Laboratory, N. Mex., Apr 1972.

7. Air Techniques Incorporated. TDA-50 DOP aerosol man test system and TDS-80 DOP portable facefit tester. Technical brochure, Baltimore, Md., Jan 1, 1979.

8. Dynatech Frontier Corporation. Model FE222 test booth, Model FE250A portable DOP aerosol quantitative man fit test system, Model FE257 tabletop DOP aerosol quantitative respirator fit test instrument, and Model FE259H polydispersed DOP aerosol test system. Technical brochure, Albuquerque, N. Mex., May 1, 1979.

9. White, J. M., and R. J. Beal. The measurement of leakage of respirators. Am Ind Hyg Assoc J 27:239 (1966).

10. Hyatt, E. C. Respirator protection factors. Informal Report LA-6084-MS, Los Alamos Scientific Laboratory, Los Alamos, N. Mex., Jan 1976.

11. Hyatt, E. C., J. A. Pritchard, B. J. Held, D. A. Bevis, T. O. Davis, L. A. Geoffrion, A. L. Hack, P. L. Lowry, T. O. Moore, C. P. Richards, and L. D. Wheat. Respiratory studies for the National Institute for Occupational Safety and Health. Progress Report LA-5620-PR; Los Alamos Scientific Laboratory, Los Alamos, N. Mex., June 1973.

12. Kolesar, E. S., Jr. A high-sensitivity, low-cost voltage-to-frequency integrator for laboratory strip-chart recorders. Aviat Space Environ Med. (To be published, 1982)

APPENDIX A:

Technical Note

USAFSAM Di-2-ethylhexyl Phthalate Respirator Quantitative Fit Test Instrument (Dynatech Frontier Corporation Model FE259H) Calibration Procedure

Edward S. Kolesar, Jr., Captain, USAFSAM/VNL
Colette M. de la Barre, Staff Sergeant, USAFSAM/VNL

5 January 1981

--APPENDIX A--

USAFSAM Di-2-ethylhexyl Phthalate Respirator Quantitative Fit Test Instrument (Dynatech Frontier Corporation Model FE259H) Calibration Procedure

INTRODUCTION

The Dynatech Frontier Corporation Model FE259H polydispersed di-2-ethylhexyl phthalate (DEHP) respirator quantitative fit test (RQFT) instrument is designed to generate a liquid aerosol challenge atmosphere that is reproducible in particle size {[0.5 - 0.6 µm] - [mass median aerodynamic diameter (MMAD)]} and in concentration (25 ± 5 µg/liter) [1-6]. The major subsystems of the FE259H RQFT instrument are the Model FE971 linear forward light scattering photometer, an aerosol generator, a dilution air system, and a Model FE701 strip-chart recorder [1, 3-5]. When the FE259H instrument is used in conjunction with the Model FE222 test booth, measurements of RQFT protection factors (PFs) can be accomplished [2, 5].

This technical note describes the analytical procedures that can be used to generate and maintain a known test booth challenge concentration of DEHP (normally, 30 µg/liter for full-face respirator tests). Implementation of this procedure will require the operator to make only two adjustments to the instrument. After the ambient temperature (°F) and barometric pressure (cm Hg) are measured, the FE259H aerosol generator air pressure and aerosol dilution air differential pressure settings are made. These two settings will optimize the test booth's response time (time required for the test booth to attain an equilibrium aerosol challenge concentration from an initial start-up), and the instrument's dynamic capability to achieve and maintain a desired challenge aerosol concentration.

ANALYTIC PERFORMANCE EQUATIONS

Five equations predict the performance and operation of the USAFSAM DEHP RQFT instrument [1, 3-10]:

$$\dot{M}_g = CQ_t \quad \text{(A-1)}$$

$$P_g = (\dot{M}_g - a_o)/a_1 \quad \text{(A-2)}$$

$$Q_g = b_1 P_g + b_o \quad \text{(A-3)}$$

$$Q_d = Q_t - Q_g \quad \text{(A-4)}$$

$$\Delta P = (Q_d/k)^2\ (P/T) \quad \text{(A-5)}$$

where,

ΔP = aerosol dilution air differential pressure setting [also the magnehelic water column gauge setting (inches of H_2O)]

P_g = aerosol generator air pressure (psig)

P = average ambient barometric pressure (cm of Hg)

$\dot{M}_g$ = aerosol generator mass flow rate (mg/min)

Q_t = total system volumetric aerosol flow rate (liters/min)

Q_d = volumetric dilution air flow rate (liters/min)

Q_g = volumetric aerosol generator flow rate (liters/min)

C = chamber concentration of DEHP (μg/liter)

T = average ambient temperature (°K)

a_o, a_1, b_o, b_1, and k = unique instrumental calibration constants supplied by the manufacturer.

For the USAFSAM instrument [1, 3-5]:

a_o = -23.9 mg/min

a_1 = 9.26 mg/min•psig

b_o = 17.2 liter/min

b_1 = 2.72 liters/min•psig

k = 119.0 liters•cm $Hg^{\frac{1}{2}}$/min•$°K^{\frac{1}{2}}$•$psig^{\frac{1}{2}}$

C = 30 μg/liter

EXAMPLE CALCULATION

As an example, a typical calculation can be accomplished considering the following conditions:

T = 72°F

P = 75 cm Hg

Q_t = 849.6 liters/min (30 cfm)

--APPENDIX A--

The aerosol generator's mass flow rate can be calculated using Equation (A-1):

$$\dot{M}_g = (30\ \mu g/liter)\ (1\ mg/1000\ \mu g)\ (849.6\ liters/min)$$

$$\dot{M}_g = 25.49\ mg/min$$

The aerosol generator pressure setting can be calculated using Equation (A-2):

$$P_g = \frac{(25.49\ mg/min) - (-23.9\ mg/min)}{(9.26\ mg/min \cdot psig)}$$

$$P_g = 5.33\ psig$$

The volumetric aerosol generator air flow rate can be calculated using Equation (A-3):

$$Q_g = (2.72\ liters/min \cdot psig)\ (5.33\ psig) + (17.2\ liters/min)$$

$$Q_g = 31.70\ liters/min$$

The volumetric dilution air flow rate can be calculated using Equation (A-4):

$$Q_d = (849.6\ liters/min) - (31.70\ liters/min)$$

$$Q_d = 817.9\ liters/min$$

Finally, the aerosol dilution air differential pressure setting can be calculated using Equation (A-5):

$$\Delta P = \frac{\dfrac{817.9\ liters}{min}}{\dfrac{119\ liters \cdot cm\ Hg^{\frac{1}{2}}}{min \cdot {}^{\circ}K^{\frac{1}{2}} \cdot psig}} \cdot \left[\frac{(75\ cm\ Hg)}{(295.4\ {}^{\circ}K)}\right]$$

$\Delta P = 12.0$ psig

where

$°K = (°F-32)\ 5/9 + 273.15$

Thus, for this example, the DEHP instrument's front panel aerosol generator air pressure gauge would be adjusted to 5.33 psig, and the aerosol dilution air differential pressure (magnehelic gauge) would be adjusted to 12.0 psig. These settings (at the temperature and barometric pressure considered) mean that the test booth's concentration of DEHP will be established and maintained at 30 μg/liter.

CONCLUSION

Because the aerosol generator air pressure and aerosol dilution air differential pressure (magnehelic gauge) must be adjusted for ambient temperature and barometric pressure, a table of these two settings can be constructed for various combinations of ambient temperatures and barometric pressures.

Figure A-1 illustrates the organization of Table A-1. To use Table A-1, the technician should: first, identify the aerosol generator air pressure he would like to use; second, identify the ambient temperature and barometric pressure; and, finally, read from the Table (an element x_{ij}) the aerosol dilution air differential pressure (magnehelic gauge) setting. If the situation arises that the magnehelic gauge setting is off-scale for the instrument, the technician should select a different aerosol generator air pressure setting and repeat the foregoing iterative process. Table A-1 will facilitate calibration of the instrument by the laboratory technician.

The following pages ("Attachment A-1") contain Figure A-1 and the computer-generated information for Table A-1. (Thereafter, "Attachment A-2" provides a listing of the Fortran computer program used to generate the data in Table A-1).

REFERENCES

1. Frontier Enterprises, Incorporated. Customer training workship and seminar series manual: Aerosol instrumentation for respiratory protective apparatus testing and training (DOP quantitative man fit testing - DOP apparatus quality surveillance testing), 12 June 1978.

2. Frontier Enterprises, Incorporated. Some general properties of airborne particulates. Technical Note TN 106.000, 14 Mar 1974.

NOTE: Frontier Enterprises, Incorporated, is now Dynatech Frontier Corporation, Albuquerque, N. Mex.

3. Frontier Enterprises, Incorporated. Aerosol concentration calculation procedures for the Model FE259H DOP aerosol test system. Technical Note TN 108.0001, 6 Feb 1976.

4. Frontier Enterprises, Incorporated. Dynamic aerosol characteristics of the Model FE259H DOP aerosol test system. Technical Note TN 108.0007, 24 Jan 1979.

5. Dynatech Frontier Corporation. Polydispersed DOP aerosol system Model FE259H operating manual, Albuquerque, N. Mex., 18 Apr 1980.

6. Dynatech Frontier Corporation. Photometric measurement of respirator quantitative fit test protection factors and their interpretation, use, and meaning. Albuquerque, N. Mex., 18 Nov 1978.

7. Liu, B. Y. H. (ed.). Fine particles, aerosol generation, measurement, sampling, and analysis. New York: Academic Press, 1976.

8. Echols, W. H., and J. A. Young. Studies of portable air-operated aerosol generators. NRL Report 5929. U.S. Naval Research Laboratory, Chemistry Division, Washington, D.C., 16 July 1963.

9. Davis, C. H. (ed.). Aerosol science. New York: Academic Press, 1966.

10. Hidy, G. M., and J. R. Brock. The dynamics of aerocolloidal systems. Int Rev Aerosol and Chemistry 1:1 (1970).

--APPENDIX A--

ATTACHMENT A-1:

Figure A-1 and Table A-1

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR AIR PRESSURE (PSIG) = (DESIRED SETTING)

Ambient Barometric Pressure in cm Hg

Ambient Temperature in Degrees F	72	72.5	73	73.5	74	74.5	75	75.5	76	76.5	77	77.5	78
80	$x_{1,1}$	$x_{1,2}$	$x_{1,3}$	$x_{1,4}$	$x_{1,5}$	$x_{1,6}$	$x_{1,7}$	$x_{1,8}$	$x_{1,9}$	$x_{1,10}$	$x_{1,11}$	$x_{1,12}$	$x_{1,13}$
79.5	$x_{2,1}$	$x_{2,2}$	$x_{2,3}$	$x_{2,4}$	.	.	.	.	.	.	.	.	.
79	$x_{3,1}$												.
78.5	.												.
78	.												.
77.5	.												.
77	.												.
76.5	.												.
76	.												.
75.5	.												.
75	.												.
74.5	.												.
74	.												.
73.5	.												.
73	.												.
72.5	.												.
72	.												.
71.5	.												.
71	.												.
70.5	.												.
70	.												.
69.5	.												.
69	.												.
68.5	.												.
68	.												.
67.5	.												.
67	.												.
66.5	.												.
66	.												.
65.5	.												.
65	.												.
64.5	.												.
64	.												.
63.5	.												.
63	.												.
62.5	.												.
62	.												.
61.5	.												.
61	.												.
60.5	.												.
60	$x_{41,1}$	.	.	.	.	.	.	.	.	.	.	.	$x_{41,13}$

Figure A-1. Organization of data for Table A-1. (Aerosol generator air pressure vs. aerosol dilution air differential pressure--magnehelic gauge setting--for various ambient temperatures and barometric pressures.)

TABLE A-1. AEROSOL GENERATOR AIR PRESSURE VS. AEROSOL DILUTION AIR DIFFERENTIAL PRESSURE (MAGNEHELIC GAUGE SETTING) FOR VARIOUS AMBIENT TEMPERATURES AND BAROMETRIC PRESSURES

AEROSOL GENERATOR PRESSURE (PSIG)= 2.86

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
63.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
63.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
62.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
62.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
61.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
61.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
60.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
60.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

--APPENDIX A--
(Attachment A-I)

AEROSOL GENERATOR PRESSURE (PSIG)= 2.95

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
63.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
63.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
62.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
62.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
61.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
61.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
60.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
60.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

AEROSOL GENERATOR PRESSURE (PSIG)= 3.04

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURF IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
76.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
76.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
74.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
74.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
73.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
73.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
72.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
72.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
71.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
71.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
70.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
70.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
69.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
69.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
68.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
68.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
67.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
67.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
66.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
66.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
65.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
65.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
64.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
64.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
63.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
63.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
62.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
62.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
61.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
61.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
60.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
60.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.13

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
79.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
79.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
78.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
78.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
77.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
77.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
76.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
76.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
74.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
74.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
73.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
73.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
71.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
71.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
69.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
69.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
68.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
68.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
67.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
67.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
66.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
66.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
65.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
65.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
64.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
64.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
63.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
63.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
62.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
62.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
61.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
61.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
60.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
60.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

AEROSOL GENERATOR PRESSURE (PSIG)= 3.22

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
79.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
79.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
78.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
78.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
74.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
74.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
73.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
73.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
72.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
72.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
71.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
71.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
70.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
70.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
69.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
69.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
68.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
68.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
67.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
67.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
66.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
66.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
65.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
65.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
64.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
64.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
63.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
63.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
62.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
62.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
61.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
61.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
60.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
60.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.31

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
79.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
79.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
78.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
78.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
77.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
76.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
76.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
75.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
75.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
74.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
74.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
73.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
73.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
72.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
72.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
71.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
71.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
70.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
70.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
69.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
69.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
68.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
68.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
67.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
67.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
66.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
66.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
65.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
65.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
64.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
64.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
63.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
63.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
62.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
62.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
61.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
61.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
60.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
60.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.41

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
79.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
79.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
78.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
78.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
77.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
77.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
76.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
76.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
75.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
75.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
74.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
74.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
73.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
73.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
72.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
72.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
71.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
71.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
70.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
70.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
69.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
69.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
68.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
68.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
67.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
67.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
66.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
66.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
65.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
65.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
64.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
64.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
63.5	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
62.5	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
62.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
61.5	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
61.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60.5	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60.0	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.50

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
79.5	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
79.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
78.5	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
78.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.5	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
76.5	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
76.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
75.5	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
75.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
74.5	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
74.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
73.5	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
73.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
72.5	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
72.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
71.5	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
71.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
70.5	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
70.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
69.5	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
69.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
68.5	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
68.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
67.5	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
67.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
66.5	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
66.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
65.5	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
65.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
64.5	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
64.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
62.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
62.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
61.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
61.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
60.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
60.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.59

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
79.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
79.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
78.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
78.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
77.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
77.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
76.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5
76.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
75.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
75.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
74.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
74.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
73.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
73.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
72.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
72.0	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
71.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
71.0	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
70.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
70.0	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
69.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
69.0	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
68.5	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
68.0	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
67.5	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
67.0	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
66.5	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
66.0	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
65.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
65.0	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
64.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
64.0	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
63.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
63.0	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
62.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
62.0	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
61.5	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
61.0	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
60.5	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
60.0	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.68

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
79.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
79.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
78.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
78.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
77.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
77.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
76.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
76.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
75.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
75.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
74.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
74.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
73.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
73.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8
72.5	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
72.0	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
71.5	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
71.0	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
70.5	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
70.0	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
69.5	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
69.0	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
68.5	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
68.0	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
67.5	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
67.0	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
66.5	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
66.0	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
65.5	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
65.0	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
64.5	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
64.0	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
63.5	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
63.0	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
62.5	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
62.0	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
61.5	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
61.0	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9
60.5	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9
60.0	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.77

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
79.5	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
79.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
78.5	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
78.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
76.5	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
76.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75.5	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
75.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
74.5	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
74.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
73.5	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
73.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
72.5	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
72.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
71.5	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
71.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
70.5	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
70.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
69.5	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
69.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2
68.5	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
68.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
67.5	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
67.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
66.5	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
66.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
65.5	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2
65.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
64.5	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
64.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
63.5	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
63.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
62.5	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
62.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
61.5	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2
61.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2
60.5	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2
60.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 3.87

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
79.5	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
79.0	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
78.5	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
78.0	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
77.5	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
77.0	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
76.5	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
76.0	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
75.5	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
75.0	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
74.5	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
74.0	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
73.5	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
73.0	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
72.5	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
72.0	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
71.5	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
71.0	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
70.5	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
70.0	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
69.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
69.0	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
68.5	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
68.0	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
67.5	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
67.0	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
66.5	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
66.0	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6
65.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
65.0	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
64.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
64.0	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
63.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
63.0	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
62.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6
62.0	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6
61.5	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6
61.0	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6
60.5	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6
60.0	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6

AEROSOL GENERATOR PRESSURE (PSIG)= 3.96

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9
79.5	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9
79.0	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9
78.5	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9
78.0	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9
77.5	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
77.0	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
76.5	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
76.0	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
75.5	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
75.0	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
74.5	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
74.0	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
73.5	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
73.0	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
72.5	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
72.0	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
71.5	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
71.0	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
70.5	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9
70.0	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9
69.5	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0
69.0	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0
68.5	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0
68.0	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0
67.5	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0
67.0	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	3.0
66.5	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0
66.0	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0
65.5	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0
65.0	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0
64.5	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0
64.0	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0
63.5	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0
63.0	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0
62.5	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0
62.0	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0
61.5	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0
61.0	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0
60.5	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0
60.0	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.05

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
79.5	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
79.0	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
78.5	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
78.0	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
77.5	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
77.0	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
76.5	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3
76.0	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3
75.5	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3
75.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3
74.5	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4
74.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4
73.5	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4
73.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4
72.5	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4
72.0	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4
71.5	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4
71.0	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4
70.5	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4
70.0	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4
69.5	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4
69.0	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4
68.5	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4
68.0	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4
67.5	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4
67.0	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4
66.5	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4
66.0	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4
65.5	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4
65.0	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4
64.5	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4
64.0	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
63.5	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
63.0	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
62.5	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
62.0	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
61.5	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
61.0	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4
60.5	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4
60.0	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.14

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8
79.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.8
79.0	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8
78.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8
78.0	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8
77.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8
77.0	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8
76.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8
76.0	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.8	3.8
75.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8
75.0	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8
74.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8
74.0	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8
73.5	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8
73.0	3.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8
72.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.8	3.8	3.8
72.0	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
71.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
71.0	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
70.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
70.0	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
69.5	3.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
69.0	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8
68.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
68.0	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
67.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
67.0	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
66.5	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
66.0	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
65.5	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9
65.0	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9
64.5	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9
64.0	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9
63.5	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9
63.0	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9
62.5	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9
62.0	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.9	3.9	3.9
61.5	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9	3.9
61.0	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9	3.9
60.5	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9	3.9
60.0	3.6	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.9	3.9	3.9

AEROSOL GENERATOR PRESSURE (PSIG)= 4.23

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	3.9	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3
79.5	3.9	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3
79.0	3.9	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3
78.5	3.9	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3
78.0	3.9	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3
77.5	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3
77.0	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3
76.5	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3
76.0	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3
75.5	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3
75.0	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3
74.5	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3
74.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3
73.5	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3
73.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3
72.5	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3
72.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3
71.5	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3
71.0	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3
70.5	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3
70.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3
69.5	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3
69.0	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3
68.5	4.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3
68.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.3
67.5	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4
67.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4
66.5	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4
66.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4
65.5	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4
65.0	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4
64.5	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4
64.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4
63.5	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4
63.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4
62.5	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4	4.4
62.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4	4.4
61.5	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4	4.4
61.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.4	4.4
60.5	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4	4.4
60.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4	4.4

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.32

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	4.4	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8
79.5	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8
79.0	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8
78.5	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8
78.0	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8
77.5	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8
77.0	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8
76.5	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8
76.0	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8
75.5	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8
75.0	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8
74.5	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8
74.0	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8
73.5	4.4	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8
73.0	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8
72.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8
72.0	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8
71.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.8
71.0	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.8
70.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8
70.0	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9
69.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9
69.0	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9
68.5	4.5	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9
68.0	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.9
67.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.9
67.0	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.9
66.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9
66.0	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9
65.5	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9
65.0	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9
64.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9
64.0	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.9	4.9
63.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.9	4.9
63.0	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
62.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
62.0	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
61.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
61.0	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
60.5	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.9	4.9	4.9
60.0	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9	4.9

AEROSOL GENERATOR PRESSURE (PSIG)= 4.42

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3
79.5	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3
79.0	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3
78.5	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3
78.0	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3
77.5	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3
77.0	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3
76.5	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3
76.0	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3
75.5	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.4
75.0	4.9	5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.2	5.3	5.3	5.4
74.5	4.9	5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4
74.0	4.9	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4
73.5	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4
73.0	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4
72.5	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4
72.0	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.4	5.4
71.5	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4
71.0	5.0	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4
70.5	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4
70.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4
69.5	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4
69.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4
68.5	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.4	5.4	5.4
68.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
67.5	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
67.0	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
66.5	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
66.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
65.5	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.5
65.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.4	5.4	5.4	5.5
64.5	5.0	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5
64.0	5.0	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5
63.5	5.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5
63.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5
62.5	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5
62.0	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.5	5.5
61.5	5.1	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.4	5.4	5.4	5.5	5.5
61.0	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5	5.5
60.5	5.1	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5	5.5
60.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5	5.5

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.51

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9
79.5	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9
79.0	5.4	5.5	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9
78.5	5.4	5.5	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9
78.0	5.4	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9
77.5	5.4	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9
77.0	5.4	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9
76.5	5.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9
76.0	5.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9
75.5	5.5	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9
75.0	5.5	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9
74.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9
74.0	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9
73.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9
73.0	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9
72.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0
72.0	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0
71.5	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0
71.0	5.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0
70.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0
70.0	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	6.0
69.5	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	6.0
69.0	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0
68.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0
68.0	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0
67.5	5.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0
67.0	5.6	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0
66.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	6.0	6.0
66.0	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	6.0	6.0
65.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.0
65.0	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.0
64.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.0
64.0	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.0
63.5	5.6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.1
63.0	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.1
62.5	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.0	6.1
62.0	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.0	6.1
61.5	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	6.0	6.0	6.0	6.1
61.0	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.0	6.1
60.5	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.1	6.1
60.0	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.1	6.1

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.60

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	6.0	6.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5
79.5	6.0	6.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5
79.0	6.0	6.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5
78.5	6.0	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5
78.0	6.0	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5
77.5	6.0	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5
77.0	6.0	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5
76.5	6.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5
76.0	6.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5
75.5	6.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5
75.0	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5
74.5	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5
74.0	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5
73.5	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.5
73.0	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6
72.5	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6
72.0	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6
71.5	6.1	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6
71.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6
70.5	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6
70.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6
69.5	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.6
69.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.6
68.5	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6
68.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6
67.5	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6
67.0	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6
66.5	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6
66.0	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.6	6.6
65.5	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.6	6.6
65.0	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6	6.7
64.5	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6	6.7
64.0	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.7
63.5	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.7
63.0	6.2	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.7
62.5	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.6	6.6	6.7
62.0	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.6	6.6	6.6	6.7
61.5	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6	6.7	6.7
61.0	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.6	6.6	6.7	6.7
60.5	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.7	6.7
60.0	6.2	6.2	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.7	6.7

AEROSOL GENERATOR PRESSURE (PSIG)= 4.69

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1
79.5	6.6	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1
79.0	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1
78.5	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1
78.0	6.6	6.6	6.7	6.7	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1
77.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1
77.0	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1
76.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1
76.0	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.1
75.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2
75.0	6.6	6.7	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2
74.5	6.6	6.7	6.7	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2
74.0	6.6	6.7	6.7	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2
73.5	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1	7.2
73.0	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1	7.2
72.5	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.1	7.2
72.0	6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2
71.5	6.7	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2
71.0	6.7	6.7	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2
70.5	6.7	6.7	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2
70.0	6.7	6.7	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2
69.5	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1	7.2	7.2
69.0	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.1	7.2	7.2
68.5	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.2
68.0	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3
67.5	6.7	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3
67.0	6.7	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3
66.5	6.7	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3
66.0	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1	7.2	7.2	7.3
65.5	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.1	7.2	7.2	7.3
65.0	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.2	7.3
64.5	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3
64.0	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3
63.5	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3
63.0	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3
62.5	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3
62.0	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.2	7.3	7.3
61.5	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.3
61.0	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4
60.5	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4
60.0	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.78

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.6	7.7	7.7
79.5	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
79.0	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
78.5	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
78.0	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
77.5	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
77.0	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
76.5	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8
76.0	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
75.5	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
75.0	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
74.5	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
74.0	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
73.5	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
73.0	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9
72.5	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
72.0	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
71.5	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
71.0	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
70.5	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
70.0	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
69.5	7.3	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.9
69.0	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
68.5	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
68.0	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
67.5	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
67.0	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
66.5	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
66.0	7.3	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.9	8.0
65.5	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0
65.0	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0
64.5	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0
64.0	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0
63.5	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0
63.0	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	8.0	8.0
62.5	7.4	7.4	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.9	8.0	8.0
62.0	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0	8.0
61.5	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0	8.0
61.0	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0	8.0
60.5	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0	8.0
60.0	7.4	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	8.0	8.0

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.87

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	7.8	7.8	7.9	7.9	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4
79.5	7.8	7.8	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4
79.0	7.8	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4
78.5	7.8	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5
78.0	7.8	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5
77.5	7.8	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5
77.0	7.8	7.9	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5
76.5	7.8	7.9	7.9	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5
76.0	7.8	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5
75.5	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5
75.0	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5
74.5	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.5
74.0	7.9	7.9	8.0	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5
73.5	7.9	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5
73.0	7.9	7.9	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5
72.5	7.9	7.9	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.6
72.0	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6
71.5	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6
71.0	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.5	8.6
70.5	7.9	8.0	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6
70.0	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6
69.5	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6
69.0	7.9	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.6	8.6
68.5	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6	8.6
68.0	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6	8.6
67.5	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.5	8.6	8.6
67.0	8.0	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.6
66.5	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.7
66.0	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.7
65.5	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.6	8.6	8.7
65.0	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6	8.6	8.7
64.5	8.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6	8.6	8.7
64.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.5	8.6	8.6	8.7
63.5	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.6	8.7
63.0	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.7	8.7
62.5	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.7	8.7
62.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.5	8.6	8.6	8.7	8.7
61.5	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6	8.6	8.7	8.7
61.0	8.1	8.1	8.2	8.2	8.3	8.3	8.4	8.5	8.5	8.6	8.6	8.7	8.7
60.5	8.1	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.5	8.6	8.6	8.7	8.7
60.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.6	8.6	8.7	8.8

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 4.97

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	8.4	8.5	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.1
79.5	8.5	8.5	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2
79.0	8.5	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.0	9.1	9.2
78.5	8.5	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2
78.0	8.5	8.5	8.6	8.7	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2
77.5	8.5	8.5	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2
77.0	8.5	8.5	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2
76.5	8.5	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.1	9.2
76.0	8.5	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2
75.5	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2
75.0	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2
74.5	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2
74.0	8.5	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.2
73.5	8.5	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3
73.0	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.1	9.2	9.3
72.5	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3
72.0	8.6	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3
71.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3
71.0	8.6	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3
70.5	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3
70.0	8.6	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3
69.5	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3
69.0	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3
68.5	8.6	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3
68.0	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3	9.4
67.5	8.6	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3	9.4
67.0	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3	9.4
66.5	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3	9.4
66.0	8.7	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3	9.4
65.5	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3	9.4
65.0	8.7	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3	9.4
64.5	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3	9.4	9.4
64.0	8.7	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3	9.4	9.4
63.5	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3	9.4	9.4
63.0	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3	9.4	9.4
62.5	8.7	8.8	8.8	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3	9.4	9.5
62.0	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3	9.4	9.5
61.5	8.7	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.4	9.4	9.5
61.0	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3	9.4	9.4	9.5
60.5	8.8	8.8	8.9	8.9	9.0	9.1	9.1	9.2	9.2	9.3	9.4	9.4	9.5
60.0	8.8	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3	9.4	9.4	9.5

AEROSOL GENERATOR PRESSURE (PSIG)= 5.06

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	9.1	9.2	9.3	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9
79.5	9.1	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.6	9.7	9.8	9.8	9.9
79.0	9.1	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.8	9.9
78.5	9.2	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9
78.0	9.2	9.2	9.3	9.4	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9
77.5	9.2	9.2	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.7	9.8	9.9	9.9
77.0	9.2	9.2	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	9.9
76.5	9.2	9.3	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0
76.0	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0
75.5	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.8	9.9	10.0
75.0	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0
74.5	9.2	9.3	9.4	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0
74.0	9.2	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.7	9.8	9.9	9.9	10.0
73.5	9.2	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	9.9	10.0
73.0	9.2	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0
72.5	9.3	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0
72.0	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.8	9.9	10.0	10.0
71.5	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.0
71.0	9.3	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1
70.5	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1
70.0	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	9.9	10.0	10.1
69.5	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1
69.0	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1
68.5	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.8	9.9	10.0	10.0	10.1
68.0	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.0	10.1
67.5	9.3	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1
67.0	9.4	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1
66.5	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	9.9	10.0	10.1	10.1
66.0	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1	10.2
65.5	9.4	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1	10.2
65.0	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.8	9.9	10.0	10.0	10.1	10.2
64.5	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.2
64.0	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.2
63.5	9.4	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.2
63.0	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	9.9	10.0	10.1	10.1	10.2
62.5	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1	10.2	10.2
62.0	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1	10.2	10.2
61.5	9.5	9.5	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	10.1	10.2	10.2
61.0	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.2	10.3
60.5	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.2	10.3
60.0	9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.2	10.3

--APPENDIX A--
(Attachment A-1)

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.15

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	9.8	9.9	10.0	10.0	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7
79.5	9.8	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7
79.0	9.9	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7
78.5	9.9	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7
78.0	9.9	9.9	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7
77.5	9.9	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7
77.0	9.9	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.7	10.7
76.5	9.9	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.5	10.5	10.6	10.7	10.7
76.0	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.7
75.5	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.8
75.0	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7	10.8
74.5	9.9	10.0	10.1	10.1	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8
74.0	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8
73.5	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.7	10.7	10.8
73.0	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8
72.5	10.0	10.0	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8
72.0	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.8	10.8
71.5	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8
71.0	10.0	10.1	10.1	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.8
70.5	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.9
70.0	10.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.7	10.7	10.8	10.9
69.5	10.0	10.1	10.2	10.2	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8	10.9
69.0	10.0	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8	10.9
68.5	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.8	10.8	10.9
68.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9
67.5	10.1	10.1	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9
67.0	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.9	10.9
66.5	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.7	10.7	10.8	10.9	10.9
66.0	10.1	10.2	10.2	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8	10.9	10.9
65.5	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8	10.9	11.0
65.0	10.1	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.8	10.8	10.9	11.0
64.5	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	11.0
64.0	10.1	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	11.0
63.5	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.9	10.9	11.0
63.0	10.2	10.2	10.3	10.4	10.4	10.5	10.6	10.7	10.7	10.8	10.9	10.9	11.0
62.5	10.2	10.2	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8	10.9	10.9	11.0
62.0	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.7	10.8	10.9	11.0	11.0
61.5	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.7	10.8	10.8	10.9	11.0	11.0
61.0	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	11.0	11.0
60.5	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	11.0	11.1
60.0	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.9	10.9	11.0	11.1

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.24

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	10.6	10.7	10.7	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5
79.5	10.6	10.7	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5
79.0	10.6	10.7	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5
78.5	10.6	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.3	11.4	11.5
78.0	10.6	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5
77.5	10.6	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5
77.0	10.6	10.7	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5
76.5	10.6	10.7	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5
76.0	10.7	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.5
75.5	10.7	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6
75.0	10.7	10.8	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6
74.5	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6
74.0	10.7	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6
73.5	10.7	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6
73.0	10.7	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6
72.5	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6
72.0	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6
71.5	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6
71.0	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7
70.5	10.8	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7
70.0	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7
69.5	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7
69.0	10.8	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7
68.5	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.7
68.0	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.7
67.5	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7
67.0	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7
66.5	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8
66.0	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8
65.5	10.9	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.6	11.6	11.7	11.8
65.0	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.7	11.8
64.5	10.9	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.7	11.8
64.0	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7	11.8
63.5	10.9	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7	11.8
63.0	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8	11.8
62.5	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8	11.8
62.0	10.9	11.0	11.1	11.2	11.2	11.3	11.4	11.5	11.6	11.6	11.7	11.8	11.9
61.5	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.7	11.8	11.9
61.0	11.0	11.0	11.1	11.2	11.3	11.3	11.4	11.5	11.6	11.7	11.7	11.8	11.9
60.5	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7	11.8	11.9
60.0	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7	11.8	11.9

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.33

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	11.3	11.4	11.5	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3
79.5	11.4	11.4	11.5	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3
79.0	11.4	11.4	11.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3
78.5	11.4	11.5	11.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3
78.0	11.4	11.5	11.5	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3
77.5	11.4	11.5	11.6	11.6	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.3
77.0	11.4	11.5	11.6	11.6	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.4
76.5	11.4	11.5	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4
76.0	11.4	11.5	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4
75.5	11.4	11.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4
75.0	11.5	11.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4
74.5	11.5	11.5	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3	12.4
74.0	11.5	11.6	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3	12.4
73.5	11.5	11.6	11.6	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.4	12.4
73.0	11.5	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5
72.5	11.5	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5
72.0	11.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5
71.5	11.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5
71.0	11.5	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3	12.4	12.5
70.5	11.5	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.4	12.4	12.5
70.0	11.6	11.6	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.4	12.4	12.5
69.5	11.6	11.6	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5	12.5
69.0	11.6	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5	12.5
68.5	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6
68.0	11.6	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6
67.5	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3	12.4	12.5	12.6
67.0	11.6	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.4	12.4	12.5	12.6
66.5	11.6	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.4	12.4	12.5	12.6
66.0	11.6	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5	12.5	12.6
65.5	11.7	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5	12.5	12.6
65.0	11.7	11.7	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6	12.6
64.5	11.7	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6	12.7
64.0	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3	12.4	12.5	12.6	12.7
63.5	11.7	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.4	12.4	12.5	12.6	12.7
63.0	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.3	12.4	12.4	12.5	12.6	12.7
62.5	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5	12.5	12.6	12.7
62.0	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4	12.5	12.6	12.6	12.7
61.5	11.7	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6	12.6	12.7
61.0	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6	12.7	12.7
60.5	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.3	12.4	12.5	12.6	12.7	12.8
60.0	11.8	11.9	11.9	12.0	12.1	12.2	12.3	12.4	12.4	12.5	12.6	12.7	12.8

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.43

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	12.1	12.2	12.3	12.4	12.5	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.1
79.5	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2
79.0	12.2	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2
78.5	12.2	12.3	12.3	12.4	12.5	12.6	12.7	12.8	12.8	12.9	13.0	13.1	13.2
78.0	12.2	12.3	12.4	12.4	12.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2
77.5	12.2	12.3	12.4	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2
77.0	12.2	12.3	12.4	12.5	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2
76.5	12.2	12.3	12.4	12.5	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2
76.0	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2	13.2
75.5	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2	13.3
75.0	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.3
74.5	12.3	12.3	12.4	12.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2	13.3
74.0	12.3	12.4	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.3
73.5	12.3	12.4	12.5	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3
73.0	12.3	12.4	12.5	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3
72.5	12.3	12.4	12.5	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.2	13.3
72.0	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.3
71.5	12.3	12.4	12.5	12.6	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4
71.0	12.3	12.4	12.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2	13.3	13.4
70.5	12.4	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.3	13.4
70.0	12.4	12.5	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3	13.4
69.5	12.4	12.5	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.2	13.3	13.4
69.0	12.4	12.5	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.2	13.3	13.4
68.5	12.4	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.3	13.4
68.0	12.4	12.5	12.6	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.4
67.5	12.4	12.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2	13.3	13.4	13.5
67.0	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.3	13.4	13.5
66.5	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3	13.4	13.5
66.0	12.5	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.2	13.3	13.4	13.5
65.5	12.5	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.3	13.4	13.5
65.0	12.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.4	13.5
64.5	12.5	12.6	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.4	13.5
64.0	12.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.5
63.5	12.5	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.3	13.4	13.5	13.6
63.0	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3	13.4	13.5	13.6
62.5	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.2	13.3	13.4	13.5	13.6
62.0	12.6	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.3	13.4	13.5	13.6
61.5	12.6	12.7	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.4	13.5	13.6
61.0	12.6	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.5	13.6
60.5	12.6	12.7	12.8	12.9	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.6
60.0	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.52

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	13.0	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0
79.5	13.0	13.1	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.0
79.0	13.0	13.1	13.2	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1
78.5	13.0	13.1	13.2	13.3	13.4	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1
78.0	13.0	13.1	13.2	13.3	13.4	13.5	13.5	13.6	13.7	13.8	13.9	14.0	14.1
77.5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.6	13.7	13.8	13.9	14.0	14.1
77.0	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.8	13.9	14.0	14.1
76.5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0	14.1
76.0	13.1	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.0	14.1
75.5	13.1	13.2	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2
75.0	13.1	13.2	13.3	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2
74.5	13.1	13.2	13.3	13.4	13.5	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2
74.0	13.1	13.2	13.3	13.4	13.5	13.6	13.6	13.7	13.8	13.9	14.0	14.1	14.2
73.5	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.8	13.9	14.0	14.1	14.2
73.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0	14.1	14.2
72.5	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.0	14.1	14.2
72.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.2
71.5	13.2	13.3	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3
71.0	13.2	13.3	13.4	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3
70.5	13.2	13.3	13.4	13.5	13.6	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3
70.0	13.2	13.3	13.4	13.5	13.6	13.7	13.7	13.8	13.9	14.0	14.1	14.2	14.3
69.5	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0	14.1	14.2	14.3
69.0	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.1	14.2	14.3
68.5	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.2	14.3
68.0	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4
67.5	13.3	13.4	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4
67.0	13.3	13.4	13.5	13.6	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4
66.5	13.3	13.4	13.5	13.6	13.7	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4
66.0	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0	14.1	14.2	14.3	14.4
65.5	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.1	14.2	14.3	14.4
65.0	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.3	14.4
64.5	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.4
64.0	13.4	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5
63.5	13.4	13.5	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5
63.0	13.4	13.5	13.6	13.7	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5
62.5	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0	14.1	14.2	14.3	14.4	14.5
62.0	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.1	14.2	14.3	14.4	14.5
61.5	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.3	14.4	14.5
61.0	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.5
60.5	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6
60.0	13.5	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.61

AMBIENT BAROMETRIC PRESSURE IN CM HG

		72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
	80.0	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
	79.5	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
	79.0	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
	78.5	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
	78.0	13.9	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
A	77.5	13.9	14.0	14.1	14.2	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
M	77.0	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.6	14.7	14.8	14.9	15.0
B	76.5	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.0
I	76.0	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1
E	75.5	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1
N	75.0	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1
T	74.5	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14 6	14.7	14.8	14.9	15.0	15.1
	74.0	14.0	14.1	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1
T	73.5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.6	14.7	14.8	14.9	15.0	15.1
E	73.0	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.0	15.1
M	72.5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2
P	72.0	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2
E	71.5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2
R	71.0	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2
A	70.5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2
T	70.0	14.1	14.2	14.3	14.4	14.5	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2
U	69.5	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.1	15.2
R	69.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
E	68.5	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
	68.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
I	67.5	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
N	67.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
	66.5	14.2	14.3	14.4	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
D	66.0	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.3
E	65.5	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4
G	65.0	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4
	64.5	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4
F	64.0	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4
	63.5	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4
	63.0	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4
	62.5	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5
	62.0	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5
	61.5	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5
	61.0	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5
	60.5	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5
	60.0	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.70

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9
79.5	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9
79.0	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9
78.5	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9
78.0	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.8	15.9	16.0
77.5	14.7	14.8	14.9	15.0	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0
77.0	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0
76.5	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0
76.0	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0
75.5	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0
75.0	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0
74.5	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.8	15.9	16.0	16.1
74.0	14.8	14.9	15.0	15.1	15.2	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
73.5	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
73.0	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
72.5	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
72.0	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
71.5	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
71.0	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.8	15.9	16.0	16.1	16.2
70.5	14.9	15.0	15.1	15.2	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2
70.0	14.9	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2
69.5	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2
69.0	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2
68.5	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2
68.0	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.2	16.3
67.5	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.8	15.9	16.0	16.1	16.2	16.3
67.0	15.0	15.1	15.2	15.3	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3
66.5	15.0	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3
66.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3
65.5	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3
65.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3
64.5	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.1	16.2	16.3	16.4
64.0	15.1	15.2	15.3	15.4	15.5	15.6	15.8	15.9	16.0	16.1	16.2	16.3	16.4
63.5	15.1	15.2	15.3	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4
63.0	15.1	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4
62.5	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4
62.0	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4
61.5	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.4	16.5
61.0	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.1	16.2	16.3	16.4	16.5
60.5	15.2	15.3	15.4	15.5	15.6	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5
60.0	15.2	15.3	15.4	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 5.79

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9
79.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.5	16.6	16.7	16.8	16.9
79.0	15.6	15.7	15.8	15.9	16.0	16.1	16.3	16.4	16.5	16.6	16.7	16.8	16.9
78.5	15.6	15.7	15.8	15.9	16.0	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9
78.0	15.6	15.7	15.8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9
77.5	15.6	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9
77.0	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.9	17.0
76.5	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9	17.0
76.0	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.5	16.6	16.7	16.8	16.9	17.0
75.5	15.7	15.8	15.9	16.0	16.1	16.2	16.4	16.5	16.6	16.7	16.8	16.9	17.0
75.0	15.7	15.8	15.9	16.0	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0
74.5	15.7	15.8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0
74.0	15.7	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.1
73.5	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.9	17.0	17.1
73.0	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9	17.0	17.1
72.5	15.8	15.9	16.0	16.1	16.2	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1
72.0	15.8	15.9	16.0	16.1	16.2	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1
71.5	15.8	15.9	16.0	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1
71.0	15.8	15.9	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.2
70.5	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	17.0	17.1	17.2
70.0	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.9	17.0	17.1	17.2
69.5	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9	17.0	17.1	17.2
69.0	15.9	16.0	16.1	16.2	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1	17.2
68.5	15.9	16.0	16.1	16.2	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2
68.0	15.9	16.0	16.1	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.3
67.5	15.9	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.2	17.3
67.0	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	17.0	17.1	17.2	17.3
66.5	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.9	17.0	17.1	17.2	17.3
66.0	16.0	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9	17.0	17.1	17.2	17.3
65.5	16.0	16.1	16.2	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3
65.0	16.0	16.1	16.2	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.4
64.5	16.0	16.1	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.3	17.4
64.0	16.0	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.1	17.2	17.3	17.4
63.5	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	17.0	17.1	17.2	17.3	17.4
63.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.9	17.0	17.1	17.2	17.3	17.4
62.5	16.1	16.2	16.3	16.4	16.5	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4
62.0	16.1	16.2	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.5
61.5	16.1	16.2	16.3	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.4	17.5
61.0	16.1	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.3	17.4	17.5
60.5	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.1	17.2	17.3	17.4	17.5
60.0	16.2	16.3	16.4	16.5	16.6	16.7	16.8	17.0	17.1	17.2	17.3	17.4	17.5

AEROSOL GENERATOR PRESSURE (PSIG)= 5.88

AMBIENT BAROMETRIC PRESSURE IN CM HG

		72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
	80.0	16.5	16.6	16.7	16.8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.8	17.9
	79.5	16.5	16.6	16.7	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9
	79.0	16.5	16.6	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9
	78.5	16.5	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.5	17.6	17.7	17.8	17.9
	78.0	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.4	17.5	17.6	17.7	17.8	17.9
A	77.5	16.6	16.7	16.8	16.9	17.0	17.1	17.3	17.4	17.5	17.6	17.7	17.8	18.0
M	77.0	16.6	16.7	16.8	16.9	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.9	13.0
B	76.5	16.6	16.7	16.8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.8	17.9	18.0
I	76.0	16.6	16.7	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9	18.0
E	75.5	16.6	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9	18.0
N	75.0	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.5	17.6	17.7	17.8	17.9	18.0
T	74.5	16.7	16.8	16.9	17.0	17.1	17.2	17.4	17.5	17.6	17.7	17.8	17.9	18.1
	74.0	16.7	16.8	16.9	17.0	17.1	17.3	17.4	17.5	17.6	17.7	17.8	18.0	18.1
T	73.5	16.7	16.8	16.9	17.0	17.2	17.3	17.4	17.5	17.6	17.7	17.9	18.0	18.1
E	73.0	16.7	16.8	16.9	17.1	17.2	17.3	17.4	17.5	17.6	17.8	17.9	18.0	18.1
M	72.5	16.7	16.8	17.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9	18.0	18.1
P	72.0	16.7	16.9	17.0	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9	18.0	18.1
E	71.5	16.8	16.9	17.0	17.1	17.2	17.3	17.5	17.6	17.7	17.8	17.9	18.0	18.2
R	71.0	16.8	16.9	17.0	17.1	17.2	17.4	17.5	17.6	17.7	17.8	17.9	18.1	18.2
A	70.5	16.8	16.9	17.0	17.1	17.3	17.4	17.5	17.6	17.7	17.8	18.0	18.1	18.2
T	70.0	16.8	16.9	17.0	17.2	17.3	17.4	17.5	17.6	17.7	17.9	18.0	18.1	18.2
U	69.5	16.8	16.9	17.1	17.2	17.3	17.4	17.5	17.6	17.8	17.9	18.0	18.1	18.2
R	69.0	16.8	17.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9	18.0	18.1	18.2
E	68.5	16.9	17.0	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9	18.0	18.1	18.3
	68.0	16.9	17.0	17.1	17.2	17.3	17.5	17.6	17.7	17.8	17.9	18.0	18.2	18.3
I	67.5	16.9	17.0	17.1	17.2	17.4	17.5	17.6	17.7	17.8	17.9	18.1	18.2	18.3
N	67.0	16.9	17.0	17.1	17.3	17.4	17.5	17.6	17.7	17.8	18.0	18.1	18.2	18.3
	66.5	16.9	17.0	17.2	17.3	17.4	17.5	17.6	17.7	17.9	18.0	18.1	18.2	18.3
D	66.0	16.9	17.1	17.2	17.3	17.4	17.5	17.6	17.8	17.9	18.0	18.1	18.2	18.3
E	65.5	17.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9	18.0	18.1	18.2	18.4
G	65.0	17.0	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9	18.0	18.1	18.3	18.4
	64.5	17.0	17.1	17.2	17.3	17.5	17.6	17.7	17.8	17.9	18.0	18.2	18.3	18.4
F	64.0	17.0	17.1	17.2	17.4	17.5	17.6	17.7	17.8	17.9	18.1	18.2	18.3	18.4
	63.5	17.0	17.1	17.3	17.4	17.5	17.6	17.7	17.8	18.0	18.1	18.2	18.3	18.4
	63.0	17.0	17.2	17.3	17.4	17.5	17.6	17.7	17.9	18.0	18.1	18.2	18.3	18.5
	62.5	17.1	17.2	17.3	17.4	17.5	17.6	17.8	17.9	18.0	18.1	18.2	18.4	18.5
	62.0	17.1	17.2	17.3	17.4	17.5	17.7	17.8	17.9	18.0	18.1	18.3	18.4	18.5
	61.5	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.5
	61.0	17.1	17.2	17.3	17.5	17.6	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.5
	60.5	17.1	17.2	17.4	17.5	17.6	17.7	17.8	17.9	18.1	18.2	18.3	18.4	18.5
	60.0	17.1	17.3	17.4	17.5	17.6	17.7	17.8	18.0	18.1	18.2	18.3	18.4	18.6

AEROSOL GENERATOR PRESSURE (PSIG)= 5.98

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	17.4	17.6	17.7	17.8	17.9	18.1	18.2	18.3	18.4	18.5	18.7	18.8	18.9
79.5	17.5	17.6	17.7	17.8	18.0	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9
79.0	17.5	17.6	17.7	17.8	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	18.9
78.5	17.5	17.6	17.7	17.9	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	19.0
78.0	17.5	17.6	17.8	17.9	18.0	18.1	18.2	18.4	18.5	18.6	18.7	18.9	19.0
77.5	17.5	17.7	17.8	17.9	18.0	18.1	18.3	18.4	18.5	18.6	18.7	18.9	19.0
77.0	17.5	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.5	18.6	18.8	18.9	19.0
76.5	17.6	17.7	17.8	17.9	18.1	18.2	18.3	18.4	18.5	18.7	18.8	18.9	19.0
76.0	17.6	17.7	17.8	17.9	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.0
75.5	17.6	17.7	17.8	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	18.9	19.1
75.0	17.6	17.7	17.9	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	19.0	19.1
74.5	17.6	17.8	17.9	18.0	18.1	18.2	18.4	18.5	18.6	18.7	18.9	19.0	19.1
74.0	17.6	17.8	17.9	18.0	18.1	18.3	18.4	18.5	18.6	18.7	18.9	19.0	19.1
73.5	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.5	18.6	18.8	18.9	19.0	19.1
73.0	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.5	18.7	18.8	18.9	19.0	19.2
72.5	17.7	17.8	17.9	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.0	19.2
72.0	17.7	17.8	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	18.9	19.1	19.2
71.5	17.7	17.9	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	19.0	19.1	19.2
71.0	17.7	17.9	18.0	18.1	18.2	18.4	18.5	18.6	18.7	18.9	19.0	19.1	19.2
70.5	17.8	17.9	18.0	18.1	18.3	18.4	18.5	18.6	18.7	18.9	19.0	19.1	19.2
70.0	17.8	17.9	18.0	18.1	18.3	18.4	18.5	18.6	18.8	18.9	19.0	19.1	19.3
69.5	17.8	17.9	18.0	18.2	18.3	18.4	18.5	18.7	18.8	18.9	19.0	19.2	19.3
69.0	17.8	17.9	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.0	19.2	19.3
68.5	17.8	18.0	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.1	19.2	19.3
68.0	17.8	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	19.0	19.1	19.2	19.3
67.5	17.9	18.0	18.1	18.2	18.4	18.5	18.6	18.7	18.9	19.0	19.1	19.2	19.4
67.0	17.9	18.0	18.1	18.3	18.4	18.5	18.6	18.7	18.9	19.0	19.1	19.2	19.4
66.5	17.9	18.0	18.1	18.3	18.4	18.5	18.6	18.8	18.9	19.0	19.1	19.3	19.4
66.0	17.9	18.0	18.2	18.3	18.4	18.5	18.7	18.8	18.9	19.0	19.2	19.3	19.4
65.5	17.9	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.4
65.0	17.9	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.4
64.5	18.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	19.0	19.1	19.2	19.3	19.5
64.0	18.0	18.1	18.2	18.4	18.5	18.6	18.7	18.9	19.0	19.1	19.2	19.4	19.5
63.5	18.0	18.1	18.3	18.4	18.5	18.6	18.8	18.9	19.0	19.1	19.3	19.4	19.5
63.0	18.0	18.1	18.3	18.4	18.5	18.6	18.8	18.9	19.0	19.1	19.3	19.4	19.5
62.5	18.0	18.2	18.3	18.4	18.5	18.7	18.8	18.9	19.0	19.2	19.3	19.4	19.5
62.0	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.4	19.6
61.5	18.1	18.2	18.3	18.4	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.4	19.6
61.0	18.1	18.2	18.3	18.5	18.6	18.7	18.8	19.0	19.1	19.2	19.3	19.5	19.6
60.5	18.1	18.2	18.4	18.5	18.6	18.7	18.9	19.0	19.1	19.2	19.4	19.5	19.6
60.0	18.1	18.2	18.4	18.5	18.6	18.8	18.9	19.0	19.1	19.3	19.4	19.5	19.6

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 6.07

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	18.4	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.8	20.0
79.5	18.4	18.6	18.7	18.8	19.0	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0
79.0	18.5	18.6	18.7	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.7	19.9	20.0
78.5	18.5	18.6	18.7	18.9	19.0	19.1	19.3	19.4	19.5	19.6	19.8	19.9	20.0
78.0	18.5	18.6	18.8	18.9	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0
77.5	18.5	18.6	18.8	18.9	19.0	19.2	19.3	19.4	19.5	19.7	19.8	19.9	20.1
77.0	18.5	18.7	18.8	18.9	19.0	19.2	19.3	19.4	19.6	19.7	19.8	19.9	20.1
76.5	18.5	18.7	18.8	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.8	20.0	20.1
76.0	18.6	18.7	18.8	19.0	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1
75.5	18.6	18.7	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.7	19.9	20.0	20.1
75.0	18.6	18.7	18.9	19.0	19.1	19.2	19.4	19.5	19.6	19.8	19.9	20.0	20.2
74.5	18.6	18.7	18.9	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0	20.2
74.0	18.6	18.8	18.9	19.0	19.2	19.3	19.4	19.5	19.7	19.8	19.9	20.1	20.2
73.5	18.7	18.8	18.9	19.0	19.2	19.3	19.4	19.6	19.7	19.8	19.9	20.1	20.2
73.0	18.7	18.8	18.9	19.1	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2
72.5	18.7	18.8	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1	20.2
72.0	18.7	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.7	19.9	20.0	20.1	20.3
71.5	18.7	18.9	19.0	19.1	19.2	19.4	19.5	19.6	19.8	19.9	20.0	20.2	20.3
71.0	18.7	18.9	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0	20.2	20.3
70.5	18.8	18.9	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.1	20.2	20.3
70.0	18.8	18.9	19.0	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.3
69.5	18.8	18.9	19.1	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.4
69.0	18.8	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1	20.2	20.4
68.5	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4
68.0	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.8	19.9	20.0	20.2	20.3	20.4
67.5	18.9	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0	20.2	20.3	20.4
67.0	18.9	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.1	20.2	20.3	20.5
66.5	18.9	19.0	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.3	20.5
66.0	18.9	19.1	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.4	20.5
65.5	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.5
65.0	19.0	19.1	19.2	19.4	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.5
64.5	19.0	19.1	19.2	19.4	19.5	19.6	19.8	19.9	20.0	20.2	20.3	20.4	20.6
64.0	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0	20.2	20.3	20.4	20.6
63.5	19.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.1	20.2	20.3	20.5	20.6
63.0	19.0	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.3	20.5	20.6
62.5	19.0	19.2	19.3	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.4	20.5	20.6
62.0	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.5	20.7
61.5	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.5	20.7
61.0	19.1	19.2	19.4	19.5	19.6	19.8	19.9	20.0	20.2	20.3	20.4	20.6	20.7
60.5	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.0	20.2	20.3	20.4	20.6	20.7
60.0	19.1	19.3	19.4	19.5	19.7	19.8	19.9	20.1	20.2	20.3	20.5	20.6	20.7

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 6.16

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	19.4	19.6	19.7	19.8	20.0	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.1
79.5	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.5	20.7	20.8	20.9	21.1
79.0	19.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.6	20.7	20.8	21.0	21.1
78.5	19.5	19.6	19.8	19.9	20.0	20.2	20.3	20.4	20.6	20.7	20.8	21.0	21.1
78.0	19.5	19.6	19.8	19.9	20.0	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.1
77.5	19.5	19.7	19.8	19.9	20.1	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.2
77.0	19.5	19.7	19.8	20.0	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.0	21.2
76.5	19.6	19.7	19.8	20.0	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.1	21.2
76.0	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.5	20.7	20.8	20.9	21.1	21.2
75.5	19.6	19.7	19.9	20.0	20.1	20.3	20.4	20.6	20.7	20.8	21.0	21.1	21.2
75.0	19.6	19.8	19.9	20.0	20.2	20.3	20.4	20.6	20.7	20.8	21.0	21.1	21.3
74.5	19.6	19.8	19.9	20.0	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.1	21.3
74.0	19.7	19.8	19.9	20.1	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.2	21.3
73.5	19.7	19.8	19.9	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.0	21.2	21.3
73.0	19.7	19.8	20.0	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.1	21.2	21.3
72.5	19.7	19.8	20.0	20.1	20.3	20.4	20.5	20.7	20.8	20.9	21.1	21.2	21.4
72.0	19.7	19.9	20.0	20.1	20.3	20.4	20.5	20.7	20.8	21.0	21.1	21.2	21.4
71.5	19.7	19.9	20.0	20.2	20.3	20.4	20.6	20.7	20.8	21.0	21.1	21.3	21.4
71.0	19.8	19.9	20.0	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.1	21.3	21.4
70.5	19.8	19.9	20.1	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.2	21.3	21.4
70.0	19.8	19.9	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.0	21.2	21.3	21.5
69.5	19.8	20.0	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.1	21.2	21.3	21.5
69.0	19.8	20.0	20.1	20.3	20.4	20.5	20.7	20.8	20.9	21.1	21.2	21.4	21.5
68.5	19.9	20.0	20.1	20.3	20.4	20.5	20.7	20.8	21.0	21.1	21.2	21.4	21.5
68.0	19.9	20.0	20.2	20.3	20.4	20.6	20.7	20.8	21.0	21.1	21.3	21.4	21.5
67.5	19.9	20.0	20.2	20.3	20.4	20.6	20.7	20.9	21.0	21.1	21.3	21.4	21.6
67.0	19.9	20.1	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.2	21.3	21.4	21.6
66.5	19.9	20.1	20.2	20.3	20.5	20.6	20.8	20.9	21.0	21.2	21.3	21.5	21.6
66.0	20.0	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.1	21.2	21.3	21.5	21.6
65.5	20.0	20.1	20.2	20.4	20.5	20.7	20.8	20.9	21.1	21.2	21.4	21.5	21.6
65.0	20.0	20.1	20.3	20.4	20.5	20.7	20.8	21.0	21.1	21.2	21.4	21.5	21.7
64.5	20.0	20.1	20.3	20.4	20.6	20.7	20.8	21.0	21.1	21.3	21.4	21.5	21.7
64.0	20.0	20.2	20.3	20.4	20.6	20.7	20.9	21.0	21.1	21.3	21.4	21.6	21.7
63.5	20.0	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.2	21.3	21.4	21.6	21.7
63.0	20.1	20.2	20.3	20.5	20.6	20.8	20.9	21.0	21.2	21.3	21.5	21.6	21.7
62.5	20.1	20.2	20.4	20.5	20.6	20.8	20.9	21.1	21.2	21.3	21.5	21.6	21.8
62.0	20.1	20.2	20.4	20.5	20.7	20.8	20.9	21.1	21.2	21.4	21.5	21.6	21.8
61.5	20.1	20.3	20.4	20.5	20.7	20.8	21.0	21.1	21.2	21.4	21.5	21.7	21.8
61.0	20.1	20.3	20.4	20.6	20.7	20.8	21.0	21.1	21.3	21.4	21.5	21.7	21.8
60.5	20.2	20.3	20.4	20.6	20.7	20.9	21.0	21.1	21.3	21.4	21.6	21.7	21.8
60.0	20.2	20.3	20.5	20.6	20.7	20.9	21.0	21.2	21.3	21.4	21.6	21.7	21.9

--APPENDIX A--
(Attachment A-1)

AEROSOL GENERATOR PRESSURE (PSIG)= 6.25

AMBIENT BAROMETRIC PRESSURE IN CM HG

AMBIENT TEMPERATURE IN DEG F	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0	76.5	77.0	77.5	78.0
80.0	20.5	20.6	20.8	20.9	21.0	21.2	21.3	21.5	21.6	21.7	21.9	22.0	22.2
79.5	20.5	20.6	20.8	20.9	21.1	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2
79.0	20.5	20.6	20.8	20.9	21.1	21.2	21.4	21.5	21.6	21.8	21.9	22.1	22.2
78.5	20.5	20.7	20.8	21.0	21.1	21.2	21.4	21.5	21.7	21.8	21.9	22.1	22.2
78.0	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.5	21.7	21.8	22.0	22.1	22.3
77.5	20.6	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.8	22.0	22.1	22.3
77.0	20.6	20.7	20.9	21.0	21.2	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.3
76.5	20.6	20.7	20.9	21.0	21.2	21.3	21.5	21.6	21.7	21.9	22.0	22.2	22.3
76.0	20.6	20.8	20.9	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.3
75.5	20.6	20.8	20.9	21.1	21.2	21.4	21.5	21.6	21.8	21.9	22.1	22.2	22.4
75.0	20.7	20.8	20.9	21.1	21.2	21.4	21.5	21.7	21.8	21.9	22.1	22.2	22.4
74.5	20.7	20.8	21.0	21.1	21.3	21.4	21.5	21.7	21.8	22.0	22.1	22.3	22.4
74.0	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.8	22.0	22.1	22.3	22.4
73.5	20.7	20.9	21.0	21.1	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.3	22.4
73.0	20.7	20.9	21.0	21.2	21.3	21.5	21.6	21.7	21.9	22.0	22.2	22.3	22.5
72.5	20.8	20.9	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.3	22.5
72.0	20.8	20.9	21.1	21.2	21.4	21.5	21.6	21.8	21.9	22.1	22.2	22.4	22.5
71.5	20.8	20.9	21.1	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.2	22.4	22.5
71.0	20.8	21.0	21.1	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.5
70.5	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.8	22.0	22.1	22.3	22.4	22.6
70.0	20.9	21.0	21.1	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.3	22.4	22.6
69.5	20.9	21.0	21.2	21.3	21.5	21.6	21.7	21.9	22.0	22.2	22.3	22.5	22.6
69.0	20.9	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.3	22.5	22.6
68.5	20.9	21.1	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	22.5	22.7
68.0	20.9	21.1	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.2	22.4	22.5	22.7
67.5	21.0	21.1	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7
67.0	21.0	21.1	21.3	21.4	21.6	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7
66.5	21.0	21.1	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.3	22.5	22.6	22.7
66.0	21.0	21.2	21.3	21.5	21.6	21.7	21.9	22.0	22.2	22.3	22.5	22.6	22.8
65.5	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.3	22.5	22.6	22.8
65.0	21.1	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	22.5	22.7	22.8
64.5	21.1	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.2	22.4	22.5	22.7	22.8
64.0	21.1	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9
63.5	21.1	21.3	21.4	21.6	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9
63.0	21.1	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.3	22.5	22.6	22.7	22.9
62.5	21.2	21.3	21.4	21.6	21.7	21.9	22.0	22.2	22.3	22.5	22.6	22.8	22.9
62.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.3	22.5	22.6	22.8	22.9
61.5	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	22.5	22.7	22.8	23.0
61.0	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.2	22.4	22.5	22.7	22.8	23.0
60.5	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	23.0
60.0	21.3	21.4	21.6	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	23.0

--APPENDIX A--

ATTACHMENT A-2:

Fortran Computer Program Listing
Used To Generate Table A-1

--APPENDIX A--
(Attachment A-2)

FORTRAN COMPUTER PROGRAM LISTING
USED TO GENERATE TABLE A-1

```
C THIS PROGRAM PRODUCES A TABLE FOR USE IN THE USAFSAM DEHP RQFT
C INSTRUMENT CALIBRATION PROCEDURE (DYNATECH FRONTIER CORP. MODEL
C FE259H).
C
C
      DIMENSION QT(40),DELTA P(41,13),T1(42),P(13)
      REAL MG
      INTEGER TEMP,PRESS
      BYTE WORD(41)
      OPEN (UNIT=1,DISPOSE='SAVE',TYPE='NEW',NAME='TABLE.DAT')
        WORD(6)='A'
        WORD(7)='M'
        WORD(8)='B'
        WORD(9)='I'
        WORD(10)='E'
        WORD(11)='N'
        WORD(12)='T'
        WORD(13)=' '
        WORD(14)='T'
        WORD(15)='E'
        WORD(16)='M'
        WORD(17)='P'
        WORD(18)='E'
        WORD(19)='R'
        WORD(20)='A'
        WORD(21)='T'
        WORD(22)='U'
        WORD(23)='R'
        WORD(24)='E'
        WORD(25)=' '
        WORD(26)='I'
        WORD(27)='N'
        WORD(28)=' '
        WORD(29)='D'
        WORD(30)='E'
        WORD(31)='G'
        WORD(32)=' '
        WORD(33)='F'
      DO 15 I2=1,5
   15 WORD(I2)=' '
      DO 17 I3=34,41
   17 WORD(I3)=' '
C
C THE FOLLOWING SET OF VARIABLES ARE UNIQUE INSTRUMENTAL
C CALIBRATION CONSTANTS SUPPLIED BY THE MANUFACTURER:
      A0=(-23.9)
      A1=9.26
      B0=17.2
      B1=2.72
      K=119.0
C
C
C QT(I)=THE TOTAL SYSTEM VOLUMETRIC AEROSOL FLOW RATE
C       (LITERS/MIN OR CFM X 28.32). RANGE OF QT(I) IS
C       3-40 CFM.
```

--APPENDIX A--
(Attachment A-2)

```
C
C C= 30 MICROGRAM/LITER = CHAMBER CONCENTRATION OF
C  DEHP (MICROGRAM/LITER)
      C=30.
C
C MG=C/1000 X QT(I)=AEROSOL GENERATOR MASS FLOW RATE
C
C
C T(1)=INITIAL TEMPERATURE IN FAHRENHEIT
      T1(1)=80.
C
      WRITE(1,5)
    5 FORMAT ('1',T31,'TABLE1.  AEROSOL GENERATOR AIR PRESSURE VERSUS '
     *,'AEROSOL DILUTION AIR'/T31,'DIFFERENTIAL PRESSURE (MAGNEHELIC GUA
     *GE SETTING) FOR VARIOUS AMBIENT'/T46,'TEMPERATURES AND BAROMETRIC
     * PRESSURES')
C
C
      DO 10 I=3,40
C P(PRESS)=72.=INITIAL AMBIENT BAROMETRIC PRESSURE (CM HG)
      P(1)=72.
      QT(I)=I*28.32
      MG=C/1000*QT(I)
C PG=(MG-A0)/A1=AEROSOL GENERATOR PRESSURE (PSIG)
      PG=(MG-A0)/A1
C QG=B1 X PG + B0=VOLUMETRIC AEROSOL GENERATOR FLOW RATE (LITERS/MIN)
      QG=B1*PG+B0
C QD=QT(I)-QG = VOLUMETRIC AEROSOL GENERATOR FLOW RATE (LITERS/MIN)
      QD=QT(I)-QG
C
C PRINT TABLE HEADINGS
      WRITE (1,25) PG
   25 FORMAT ('0',T47,'AEROSOL GENERATOR PRESSURE (PSIG)=',F5.2///
     *T48,'AMBIENT BAROMETRIC PRESSURE IN CM HG'///)
C
C  CALCULATE DELTA P
      DO 20 PRESS=1,13
      DO 30 TEMP=1,41
C CHANGE FROM FAHRENHEIT TO KELVIN
      T=(T1(TEMP)-32.)*(5./9.)+273.15
      DELTA P(TEMP,PRESS)=(QD/K)**2*(P(PRESS)/T)
   30 T1(TEMP+1)=T1(TEMP)-0.5
   20 P(PRESS+1)=P(PRESS)+0.5
C  PRINT TABLE COLUMNS
      WRITE (1,35) (P(PRESS),PRESS=1,13)
   35 FORMAT (' ',T15,'|',T17,F4.1,12(5X,F4.1))
      WRITE (1,36)
   36 FORMAT (' ',T9,'-----------------------------------------------
     *------------------------------------------------------------
     *--------------------')
C PRINT TABLE VALUES
      DO 40 TEMP=1,41
      WRITE (1,45) WORD(TEMP),T1(TEMP)
     *,(DELTA P(TEMP,PRESS),PRESS=1,13)
   45 FORMAT (' ',T6,A1,T9,F4.1,T15,'|',T17,12(F4.1,5X),F4.1)
```

```
   40 CONTINUE
      WRITE (1,36)
      WRITE (1,47)
   47 FORMAT('1')
C
C
C ANOTHER AEROSOL GENERATOR PRESSURE SETTING ( ANOTHER PAGE PRINTED)
   10 CONTINUE
      CLOSE (UNIT=1)
      STOP
      END
```

APPENDIX B:

DEHPRQFT.FOR Fortran Listing

--APPENDIX B--

DEHPRQFT.FOR Fortran Listing

```
C
C     THIS PROGRAM CALCULATES PROTECTION FACTORS FOR DATA COLLECTED ON
C     THE USAFSAM/VNL DI-2-ETHYLHEXYL PHTHALATE (DEHP) RESPIRATOR
C     QUANTITATIVE FIT TEST (RQFT) INSTRUMENT.
C
C     THE CALCULATION OF A RESPIRATOR'S PROTECTION FACTOR (PF) IS
C     ACCOMPLISHED USING THE FOLLOWING RELATIONSHIP:
C
C        PF=(CC)/(RL)
C
C     WHERE,
C
C        PF=PROTECTION FACTOR
C
C        CC=AVERAGE CORRECTED CHAMBER CHALLENGE CONCENTRATION
C
C        RL=AVERAGE CORRECTED RESPIRATOR LEAKAGE CONCENTRATION FOR A
C           PARTICULAR EXERCISE
C
C
C     THE AVERAGE CORRECTED CHAMBER CHALLENGE CONCENTRATION (CC) IS
C     GIVEN BY:
C
C        CC=[(CI+CF)(KCC)/2 - (BI+BF)(KBC)/2]
C
C     OR EQUIVALENTLY (SINCE THERE IS A ONE-TO-ONE CORRESPONDENCE
C     BETWEEN THE SCATTERED LIGHT PHOTOMETER'S OUTPUT VOLTAGE AND THE
C     CONCENTRATION OF DEHP),
C
C        CC=[(VCI+VCF)(KCC)/2 - (VBI+VBF)(KBC)/2]
C
C     WHERE,
C
C        CI=AVERAGE INITIAL CHAMBER CHALLENGE CONCENTRATION (MEASURED
C           AFTER THE SUBJECT ENTERS THE CHAMBER AND JUST PRIOR TO
C           INITIATING THE FIRST EXERCISE)
C
C        CF=AVERAGE FINAL CHAMBER CHALLENGE CONCENTRATION (MEASURED
C           AFTER ALL EXERCISES HAVE BEEN COMPLETED AND JUST PRIOR TO
C           THE SUBJECT'S EXIT FROM THE CHAMBER)
C
C        KCC=INSTRUMENT'S SAMPLING RANGE SWITCH POSITION (TYPICALLY
C            100 PERCENT)
C
C        BI=AVERAGE INITIAL BASELINE CONCENTRATION (MEASURED AFTER
C           THE SUBJECT ENTERS THE CHAMBER AND JUST PRIOR TO
C           INITIATING THE FIRST EXERCISE)
C
C        BF=AVERAGE FINAL BASELINE CONCENTRATION (MEASURED AFTER ALL
C           EXERCISES HAVE BEEN COMPLETED AND JUST PRIOR TO THE
C           SUBJECT'S EXIT FROM THE CHAMBER)
C
C        KBC=INSTRUMENT'S SAMPLING RANGE SWITCH POSITION (TYPICALLY
C            10.0 - 0.01 PERCENT)
C
C        VCI=AVERAGE INITIAL VOLTAGE RESPONSE OF THE SCATTERED LIGHT
C            PHOTOMETER (CORRESPONDS TO THE VALUE FOR CI)
```

```
C
C        VCF=AVERAGE FINAL VOLTAGE RESPONSE OF THE SCATTERED LIGHT
C            PHOTOMETER (CORRESPONDS TO THE VALUE FOR CF)
C
C        VBI=AVERAGE INITIAL VOLTAGE RESPONSE OF THE SCATTERED LIGHT
C            PHOTOMETER (CORRESPONDS TO THE VALUE OF BI)
C
C        VBF=AVERAGE FINAL VOLTAGE RESPONSE OF THE SCATTERED LIGHT
C            PHOTOMETER (CORRESPONDS TO THE VALUE OF BF)
C
C
C     THE AVERAGE CORRECTED RESPIRATOR LEAKAGE CONCENTRATION (RL) IS
C     GIVEN BY:
C
C        RL=[(RE)(KE) - (BI+BF)(KBC)/2]
C
C     OR EQUIVALENTLY (SINCE THERE IS A ONE-TO-ONE CORRESPONDENCE
C     BETWEEN THE SCATTERED LIGHT PHOTOMETER'S OUTPUT VOLTAGE AND THE
C     CONCENTRATION OF DEHP),
C
C        RL=[(ASLPVO)(KE) - (VBI+VBF)(KBC)/2]
C
C     WHERE,
C
C        RE=AVERAGE RESPIRATOR LEAKAGE CONCENTRATION FOR A PARTICULAR
C           EXERCISE
C
C        KE=INSTRUMENT'S SAMPLING RANGE SWITCH POSITION USED DURING
C           THE EXERCISE MEASUREMENT TIME PERIOD (TYPICALLY 10 - 0.01
C           PERCENT)
C
C        ASLPVO=AVERAGE SCATTERED LIGHT PHOTOMETER VOLTAGE OUTPUT
C               FOR A PARTICULAR EXERCISE (CORRESPONDS TO THE VALUE
C               OF RE)
C
C*********************************************************************
C*****                                                           *****
C*****  IF YOU HAVE ANY QUESTIONS CONCERNING THIS PROGRAM CALL   *****
C*****                                                           *****
C*****            CAPTAIN EDWARD S. KOLESAR, JR.                 *****
C*****                                                           *****
C*****             USAFSAM/VNL    BROOKS AFB   TX                *****
C*****                                                           *****
C*****        AUTOVON 240-2154 OR COMMERCIAL (512)536-2154       *****
C*****                                                           *****
C*********************************************************************
C
C
      IMPLICIT INTEGER*4 (I-N)
      INTEGER FILTK
      REAL KBC,KCC
      DIMENSION ICCBS(2),IC(20),ICTP(20),SRSP(20),PF(20),RL(20),XC(20)
      BYTE SECN(9),P(10),C(10),NAME(45),MASK(45),DATE(45),TIME(45)
      BYTE GROUP 1,GROUP 2,YES,NO,REP,SELECT(7)
      DATA SECN/'1','2','3','4','5','6','7','8','9'/
      YES='Y'
      NO='N'
```

--APPENDIX B--

```
C
C     ICCBS(*) AND 4137 FORMAT ELEMENTS ARE USED IN A CRT
C     SCREEN CLEARING ALGORITHM
C
      ICCBS(1)=72*256+27
      ICCBS(2)=74*256+27
 4137 FORMAT(1H ,2A2)
C
C     ESTABLISH A FILE COUNTER AND DECLARE THE FILE NAMES
C
 5101 FILTK=1
C
C     THE FILE CALLED DATX.XXX CONTAINS THE RQFT DESCRIPTIVE
C     INFORMATION, DEHP CALIBRATION DATA, AND EXERCISE INTEGRATOR
C     COUNT DATA
C
C     THE FILE CALLED CALCX.XXX CONTAINS THE RQFT DESCRIPTIVE
C     INFORMATION, THE EXERCISE PF CALCULATIONS, AND ARITHMETIC
C     AVERAGE AND TIME-WEIGHTED AVERAGE PF CALCULATIONS
C
C     THE FILES ARE NUMBERED SEQUENTIALLY SO THAT THEY CAN BE EASILY
C     RETRIEVED FOR PRINTING AND ANALYSIS
C
C     THE FILES THAT HOLD VARIOUS SEGMENTS OF DATA ARE NAMED
C
      P(1)='D'
      P(2)='A'
      P(3)='T'
      P(4)='A'
      P(5)=SECN(FILTK)
      P(6)='.'
      P(10)=0
      C(1)='C'
      C(2)='A'
      C(3)='L'
      C(4)='C'
      C(5)=SECN(FILTK)
      C(6)='.'
      C(10)=0
      TYPE 2006
 2006 FORMAT(1X,' '///)
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      GO TO 3081
C
C     IF MORE THAN ONE SET OF RQFT DATA IS TO BE PROCESSED
C     DURING A COMPUTER RUN, THE FILE COUNTER IS AUTOMATICALLY
C     INCREMENTED TO FACILITATE KEEPING TRACK OF THE DATAX.XXX
C     AND CALCX.XXX FILES
C
 6000 FILTK=FILTK+1
      P(5)=SECN(FILTK)
      C(5)=SECN(FILTK)
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
 3081 CONTINUE
```

```
      TYPE 2002
2002  FORMAT(1X,'USER ATTENTION:  IN ORDER TO KEEP TRACK OF THE  '/
     C' DATA FILES (DATAX.XXX) BEING ANALYZED, IT IS RECOMMENDED  '/
     C' THAT THEY BE SEQUENTIALLY NUMBERED.'/)
      TYPE 306
306   FORMAT(1X,' '/)
      TYPE 2003
2003  FORMAT(1X,'ENTER THE FOLLOWING:  001 FOR THE FIRST DATA '/
     C' FILE; 002 FOR THE SECOND DATA FILE; 003 FOR THE THIRD'/
     C' DATA FILE; ETC.'/)
      TYPE 306
      TYPE 2004
2004  FORMAT(1X,'ENTRY= ',$)
      ACCEPT 2005,P(7),P(8),P(9)
2005  FORMAT(3A1)
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 5100
5100  FORMAT(1X,'USER ATTENTION:  IN ORDER TO KEEP TRACK OF THE'/
     C' CALCULATION FILES (CALCX.XXX), IT IS RECOMMENDED THAT '/
     C' THEY BE SEQUENTIALLY NUMBERED.'/)
      TYPE 306
      TYPE 5200
5200  FORMAT(1X,'ENTER THE FOLLOWING:  001 FOR THE FIRST '/
     C' CALCULATION FILE; 002 FOR THE SECOND CALCULATION FILE; '/
     C' 003 FOR THE THIRD CALCULATION FILE; ETC.'/)
      TYPE 306
      TYPE 2004
      ACCEPT 2005,C(7),C(8),C(9)
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      OPEN(UNIT=2,NAME=P,DISPOSE='SAVE',TYPE='NEW')
      OPEN(UNIT=3,NAME=C,DISPOSE='SAVE',TYPE='NEW')
C
C     THE RQFT DATA TO BE PROCESSED IS NOW ENTERED
C
C     ENTER THE DESCRIPTIVE INFORMATION CONCERNING THE SUBJECT,
C     RESPIRATOR TYPE, DATE, AND TIME TESTED
C
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 5300
5300  FORMAT(1X,'DEHP RQFT DATA: '/)
      TYPE 2006
      TYPE 3085
3085  FORMAT(1X,'SUBJECT NAME:  ',2X,$)
      ACCEPT 3086,NAME
3086  FORMAT(45A1)
      TYPE 3087
3087  FORMAT(1X,'TYPE OF RESPIRATOR:  ',2X,$)
      ACCEPT 3086,MASK
      TYPE 3088
3088  FORMAT(1X,'DATE TESTED:  ',2X,$)
      ACCEPT 3086,DATE
```

```
      TYPE 3089
 3089 FORMAT(1X,'TIME TESTED:  ',2X,$)
      ACCEPT 3086,TIME
      TYPE 2006
C
C     THE DEHP RQFT CALIBRATION DATA IS ENTERED
C
C     THIS INFORMATION IS AVAILABLE FROM THE DATA SHEET USED
C     DURING AN RQFT
C
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 99
   99 FORMAT(1X,'DEPRESS THE RETURN KEY AFTER ENTERING A'/
     C' SWITCH POSITION AND VOLTAGE'/////)
      TYPE 2006
      TYPE 40
   40 FORMAT(1X,'DEHP RQFT CALIBRATION DATA: '///)
      TYPE 41
   41 FORMAT(1X,'CALIBRATION PARAMETER',17X,'SAMPLING RANGE',8X,'AVERAGE
     C')
      TYPE 42
   42 FORMAT(1X,38X,'SWITCH POSITION',7X,'VOLTAGE')
      TYPE 43
   43 FORMAT(1X,39X,'(IN PERCENT)',8X,'(IN VOLTS)'/)
      TYPE 44
   44 FORMAT(1X,'AVERAGE INITIAL VOLTAGE')
      TYPE 45
   45 FORMAT(1X,'ASSOCIATED WITH THE MAXIMUM')
      TYPE 46
   46 FORMAT(1X,'CHAMBER CHALLENGE CONCENTRATION            ',$)
      ACCEPT 64,KCC
      CALL CLEAR(LINES)
      TYPE 47,KCC
   47 FORMAT(1H+,'CHAMBER CHALLENGE CONCENTRATION',T44,F6.2,T63,1H ,$)
      ACCEPT 48,VCI
   48 FORMAT(1F6.3)
      TYPE 306
      TYPE 49
   49 FORMAT(1X,'AVERAGE INITIAL VOLTAGE')
      TYPE 50
   50 FORMAT(1X,'ASSOCIATED WITH THE BASELINE')
      TYPE 51
   51 FORMAT(1X,'OF THE DEHP RQFT INSTRUMENT                    ',$)
      ACCEPT 64,KBC
      CALL CLEAR(LINES)
      TYPE 52,KBC
   52 FORMAT(1H+,'OF THE DEHP RQFT INSTRUMENT',T44,F6.2,T63,1H ,$)
      ACCEPT 48,VBI
      TYPE 306
      TYPE 53
   53 FORMAT(1X,'AVERAGE FINAL VOLTAGE')
      TYPE 50
      TYPE 51
      ACCEPT 64,KBC
      CALL CLEAR(LINES)
```

```
      TYPE 52,KBC
      ACCEPT 48,VBF
      TYPE 306
      TYPE 53
      TYPE 45
      TYPE 46
      ACCEPT 64,KCC
      CALL CLEAR(LINES)
      TYPE 47,KCC
      ACCEPT 48,VCF
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
C
C     SELECT THE PROPER EXERCISE PROTOCOL
C
      TYPE 3127
 3127 FORMAT(1X,'THE USER IS FREE TO SELECT ONE OF TWO GROUPS OF'/
     C' EXERCISE PROTOCOLS'//)
      TYPE 3128
 3128 FORMAT(1X,'THE [GROUP 1] EXERCISE PROTOCOL CONSISTS OF:'//
     C' [1]  NORMAL BREATHING STRAIGHT AHEAD'/
     C' [2]  DEEP BREATHING STRAIGHT AHEAD'/
     C' [3]  TALKING'/
     C' [4]  SIDE-TO-SIDE HEAD MOVEMENTS (DEEP BREATHING)'/
     C' [5]  UP-AND-DOWN HEAD MOVEMENTS  (DEEP BREATHING)'/
     C' [6]  FACIAL GRIMACING'///)
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 3129
 3129 FORMAT(1X,'THE [GROUP 2] EXERCISE PROTOCOL CONSISTS OF:'//
     C' [1]  NORMAL BREATHING STRAIGHT AHEAD'/
     C' [2]  NORMAL BREATHING LEFT'/
     C' [3]  NORMAL BREATHING RIGHT'/
     C' [4]  NORMAL BREATHING DOWN'/
     C' [5]  NORMAL BREATHING UP'/
     C' [6]  DEEP BREATHING STRAIGHT AHEAD'/
     C' [7]  DEEP BREATHING LEFT'/
     C' [8]  DEEP BREATHING RIGHT')
      TYPE 3130
 3130 FORMAT(1X,'[9]  DEEP BREATHING DOWN'/
     C' [10] DEEP BREATHING UP'/
     C' [11] TALKING'/
     C' [12] FACIAL GRIMACING'/
     C' [13] SIDE-TO-SIDE HEAD MOVEMENTS (NORMAL BREATHING)'/
     C' [14] UP-AND-DOWN HEAD MOVEMENTS  (NORMAL BREATHING)'/
     C' [15] SIDE-TO-SIDE HEAD MOVEMENTS (DEEP BREATHING)'/
     C' [16] UP-AND-DOWN HEAD MOVEMENTS  (DEEP BREATHING)'//)
 4138 TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 3131
 3131 FORMAT(1X,'TO SPECIFY THE EXERCISE PROTOCOL GROUP OF INTEREST,'/
     C' TYPE EITHER:  GROUP 1    OR    GROUP 2    ')
      TYPE 306
      TYPE 2004
```

```
      ACCEPT 3122,SELECT
 3122 FORMAT(7A1)
      IF(SELECT(7).NE.'1'.AND.SELECT(7).NE.'2') GO TO 4138
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
C
C     ENTER THE EXERCISE INTEGRATION COUNT DATA
C
C     THIS INFORMATION IS AVAILABLE FROM THE DATA SHEET USED
C     DURING THE RQFT
C
      TYPE 3021
 3021 FORMAT(1X,'USER ATTENTION:  IF NO EXERCISE COUNT DATA WAS'/
     C' COLLECTED FOR A PARTICULAR EXERCISE, TYPE:  000001.  ALSO,'/
     C' FOR EACH EXERCISE INTEGRATOR COUNT DATA ENTRY, SIX DIGITS MUST')
      TYPE 3022
 3022 FORMAT(1X,'BE TYPED, THAT IS, IF YOU HAVE A SIX DIGIT NUMBER,'/
     C' TYPE ALL SIX DIGITS.  IF YOU HAVE A FIVE DIGIT NUMBER, TYPE'/
     C' ONE LEADING ZERO AND THEN THE FIVE DIGITS.  IF YOU HAVE A')
      TYPE 3033
 3033 FORMAT(' FOUR DIGIT NUMBER, TYPE TWO LEADING ZEROS AND THEN THE'/
     C' FOUR DIGITS, ETC.  SEVERAL EXAMPLES FOLLOW AS AN ILLUSTRATION')
      TYPE 3034
 3034 FORMAT(1X,'FOR EXAMPLE:  COUNT DATA=743182   TYPED ENTRY=743182')
      TYPE 3035
 3035 FORMAT(1X,'FOR EXAMPLE:  COUNT DATA=18726    TYPED ENTRY=018726')
      TYPE 3036
 3036 FORMAT(1X,'FOR EXAMPLE:  COUNT DATA=6412     TYPED ENTRY=006412')
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 3119
 3119 FORMAT(1X,'DEPRESS THE RETURN KEY AFTER ENTERING AN'/
     C' INTEGRATOR COUNT MAGNITUDE, TIME PERIOD, AND'/
     C' SWITCH POSITION'/)
      TYPE 2006
      TYPE 3037
 3037 FORMAT(1X,'EXERCISE INTEGRATOR COUNT INFORMATION:'/)
      TYPE 3038
 3038 FORMAT(1X,'EXERCISE',26X,'INTEGRATOR',3X,'TIME PERIOD',6X,'SAMPLIN
     CG RANGE')
      TYPE 3126
 3126 FORMAT(1X,37X,'COUNT',5X,'(IN SECONDS)',5X,'SWITCH POSITION')
      TYPE 61
   61 FORMAT(1X,64X,'(AS A PERCENT)'/)
      IF(SELECT(7).EQ.'2') GO TO 3133
      TYPE 3039
 3039 FORMAT(1X,'NORMAL BREATHING STRAIGHT AHEAD    ',$)
      ACCEPT 3040,IC1
 3040 FORMAT(I6)
      CALL CLEAR(LINES)
      TYPE 3112,IC1
 3112 FORMAT(1H+,'NORMAL BREATHING STRAIGHT AHEAD',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP1
 3113 FORMAT(I2)
      CALL CLEAR(LINES)
```

```
      TYPE 62,IC1,ICTP1
   62 FORMAT(1H+,'NORMAL BREATHING STRAIGHT AHEAD',T37,I6,T53,I2,T69,1H
     C ,$)
      ACCEPT 64,SRSP1
      TYPE 3041
 3041 FORMAT(1X,'DEEP BREATHING STRAIGHT AHEAD      ',$)
      ACCEPT 3040,IC2
      CALL CLEAR(LINES)
      TYPE 3114,IC2
 3114 FORMAT(1H+,'DEEP BREATHING STRAIGHT AHEAD',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP2
      CALL CLEAR(LINES)
      TYPE 63,IC2,ICTP2
   63 FORMAT(1H+,'DEEP BREATHING STRAIGHT AHEAD',T37,I6,T53,I2,T69,1H ,$
     C)
   64 FORMAT(1F6.2)
      ACCEPT 64,SRSP2
      TYPE 3042
 3042 FORMAT(1X,'TALKING                                    ',$)
      ACCEPT 3040,IC3
      CALL CLEAR(LINES)
      TYPE 3115,IC3
 3115 FORMAT(1H+,'TALKING',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP3
      CALL CLEAR(LINES)
      TYPE 65,IC3,ICTP3
   65 FORMAT(1H+,'TALKING',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP3
      TYPE 3043
 3043 FORMAT(1X,'SIDE-TO-SIDE HEAD MOVEMENTS'/
     C' (DEEP BREATHING)                    ',$)
      ACCEPT 3040,IC4
      CALL CLEAR(LINES)
      TYPE 3116,IC4
 3116 FORMAT(1H+,'(DEEP BREATHING)',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP4
      CALL CLEAR(LINES)
      TYPE 66,IC4,ICTP4
   66 FORMAT(1H+,'(DEEP BREATHING)',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP4
      TYPE 3044
 3044 FORMAT(1X,'UP-AND-DOWN HEAD MOVEMENTS'/
     C' (DEEP BREATHING)                    ',$)
      ACCEPT 3040,IC5
      CALL CLEAR(LINES)
      TYPE 3116,IC5
      ACCEPT 3113,ICTP5
      CALL CLEAR(LINES)
      TYPE 66,IC5,ICTP5
      ACCEPT 64,SRSP5
      TYPE 3045
 3045 FORMAT(1X,'FACIAL GRIMACING                           ',$)
      ACCEPT 3040,IC6
      CALL CLEAR(LINES)
      TYPE 3117,IC6
 3117 FORMAT(1H+,'FACIAL GRIMACING',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP6
```

```
      CALL CLEAR(LINES)
      TYPE 67,IC6,ICTP6
   67 FORMAT(1H+,'FACIAL GRIMACING',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP6
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      GO TO 3153
 3133 CONTINUE
      TYPE 3039
      ACCEPT 3040,IC1
      CALL CLEAR(LINES)
      TYPE 3112,IC1
      ACCEPT 3113,ICTP1
      CALL CLEAR(LINES)
      TYPE 62,IC1,ICTP1
      ACCEPT 64,SRSP1
      TYPE 3134
 3134 FORMAT(1X,'NORMAL BREATHING LEFT                   ',$)
      ACCEPT 3040,IC2
      CALL CLEAR(LINES)
      TYPE 3135,IC2
 3135 FORMAT(1H+,'NORMAL BREATHING LEFT',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP2
      CALL CLEAR(LINES)
      TYPE 68,IC2,ICTP2
   68 FORMAT(1H+,'NORMAL BREATHING LEFT',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP2
      TYPE 3136
 3136 FORMAT(1X,'NORMAL BREATHING RIGHT                  ',$)
      ACCEPT 3040,IC3
      CALL CLEAR(LINES)
      TYPE 3137,IC3
 3137 FORMAT(1H+,'NORMAL BREATHING RIGHT',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP3
      CALL CLEAR(LINES)
      TYPE 69,IC3,ICTP3
   69 FORMAT(1H+,'NORMAL BREATHING RIGHT',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP3
      TYPE 3138
 3138 FORMAT(1X,'NORMAL BREATHING DOWN                   ',$)
      ACCEPT 3040,IC4
      CALL CLEAR(LINES)
      TYPE 3139,IC4
 3139 FORMAT(1H+,'NORMAL BREATHING DOWN',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP4
      CALL CLEAR(LINES)
      TYPE 70,IC4,ICTP4
   70 FORMAT(1H+,'NORMAL BREATHING DOWN',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP4
      TYPE 3140
 3140 FORMAT(1X,'NORMAL BREATHING UP                     ',$)
      ACCEPT 3040,IC5
      CALL CLEAR(LINES)
      TYPE 3141,IC5
 3141 FORMAT(1H+,'NORMAL BREATHING UP',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP5
```

```
      CALL CLEAR(LINES)
      TYPE 71,IC5,ICTP5
   71 FORMAT(1H+,'NORMAL BREATHING UP',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP5
      TYPE 3041
      ACCEPT 3040,IC6
      CALL CLEAR(LINES)
      TYPE 3114,IC6
      ACCEPT 3113,ICTP6
      CALL CLEAR(LINES)
      TYPE 63,IC6,ICTP6
      ACCEPT 64,SRSP6
      TYPE 3142
 3142 FORMAT(1X,'DEEP BREATHING LEFT                  ',$)
      ACCEPT 3040,IC7
      CALL CLEAR(LINES)
      TYPE 3143,IC7
 3143 FORMAT(1H+,'DEEP BREATHING LEFT',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP7
      CALL CLEAR(LINES)
      TYPE 72,IC7,ICTP7
   72 FORMAT(1H+,'DEEP BREATHING LEFT',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP7.
      TYPE 3144
 3144 FORMAT(1X,'DEEP BREATHING RIGHT                 ',$)
      ACCEPT 3040,IC8
      CALL CLEAR(LINES)
      TYPE 3145,IC8
 3145 FORMAT(1H+,'DEEP BREATHING RIGHT',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP8
      CALL CLEAR(LINES)
      TYPE 73,IC8,ICTP8
   73 FORMAT(1H+,'DEEP BREATHING RIGHT',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP8
      TYPE 3146
 3146 FORMAT(1X,'DEEP BREATHING DOWN                  ',$)
      ACCEPT 3040,IC9
      CALL CLEAR(LINES)
      TYPE 3147,IC9
 3147 FORMAT(1H+,'DEEP BREATHING DOWN',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP9
      CALL CLEAR(LINES)
      TYPE 74,IC9,ICTP9
   74 FORMAT(1H+,'DEEP BREATHING DOWN',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP9
      TYPE 3148
 3148 FORMAT(1X,'DEEP BREATHING UP                    ',$)
      ACCEPT 3040,IC10
      CALL CLEAR(LINES)
      TYPE 3149,IC10
 3149 FORMAT(1H+,'DEEP BREATHING UP',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP10
      CALL CLEAR(LINES)
      TYPE 75,IC10,ICTP10
   75 FORMAT(1H+,'DEEP BREATHING UP',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP10
      TYPE 3042
```

```
      ACCEPT 3040,IC11
      CALL CLEAR(LINES)
      TYPE 3115,IC11
      ACCEPT 3113,ICTP11
      CALL CLEAR(LINES)
      TYPE 65,IC11,ICTP11
      ACCEPT 64,SRSP11
      TYPE 3045
      ACCEPT 3040,IC12
      CALL CLEAR(LINES)
      TYPE 3117,IC12
      ACCEPT 3113,ICTP12
      CALL CLEAR(LINES)
      TYPE 67,IC12,ICTP12
      ACCEPT 64,SRSP12
      TYPE 3150
 3150 FORMAT(1X,'SIDE-TO-SIDE HEAD MOVEMENTS'/
     C' (NORMAL BREATHING)                  ',$)
      ACCEPT 3040,IC13
      CALL CLEAR(LINES)
      TYPE 3151,IC13
 3151 FORMAT(1H+,'(NORMAL BREATHING)',T37,I6,T52,1H ,$)
      ACCEPT 3113,ICTP13
      CALL CLEAR(LINES)
      TYPE 76,IC13,ICTP13
   76 FORMAT(1H+,'(NORMAL BREATHING)',T37,I6,T53,I2,T69,1H ,$)
      ACCEPT 64,SRSP13
      TYPE 3152
 3152 FORMAT(1X,'UP-AND-DOWN HEAD MOVEMENTS'/
     C' (NORMAL BREATHING)                  ',$)
      ACCEPT 3040,IC14
      CALL CLEAR(LINES)
      TYPE 3151,IC14
      ACCEPT 3113,ICTP14
      CALL CLEAR(LINES)
      TYPE 76,IC14,ICTP14
      ACCEPT 64,SRSP14
      TYPE 3043
      ACCEPT 3040,IC15
      CALL CLEAR(LINES)
      TYPE 3116,IC15
      ACCEPT 3113,ICTP15
      CALL CLEAR(LINES)
      TYPE 66,IC15,ICTP15
      ACCEPT 64,SRSP15
      TYPE 3044
      ACCEPT 3040,IC16
      CALL CLEAR(LINES)
      TYPE 3116,IC16
      ACCEPT 3113,ICTP16
      CALL CLEAR(LINES)
      TYPE 66,IC16,ICTP16
      ACCEPT 64,SRSP16
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
 3153 TYPE 2006
C
```

--APPENDIX B--

```
C     TRANSFER INFORMATION TO THE DATA.XXX FILE
C
      WRITE(2,2006)
      WRITE(2,306)
      WRITE(2,4004)
 4004 FORMAT(6X,'DEHP RQFT DATA'///)
      WRITE(2,3046)NAME
 3046 FORMAT(6X,'SUBJECT NAME:',2X,45A1)
      WRITE(2,3047)MASK
 3047 FORMAT(6X,'TYPE OF RESPIRATOR:',2X,45A1)
      WRITE(2,3048)DATE
 3048 FORMAT(6X,'DATE TESTED:',2X,45A1)
      WRITE(2,3049)TIME
 3049 FORMAT(6X,'TIME TESTED:',2X,45A1)
      WRITE(2,2006)
      WRITE(2,54)
   54 FORMAT(6X,'DEHP RQFT CALIBRATION DATA: '//)
      WRITE(2,55)
   55 FORMAT(6X,'CALIBRATION PARAMETER',17X,'SAMPLING RANGE',8X,'AVERAGE
     C')
      WRITE(2,56)
   56 FORMAT(6X,38X,'SWITCH POSITION',7X,'VOLTAGE')
      WRITE(2,57)
   57 FORMAT(6X,39X,'(IN PERCENT)',8X,'(IN VOLTS)'/)
      WRITE(2,58)
   58 FORMAT(6X,'AVERAGE INITIAL VOLTAGE')
      WRITE(2,59)
   59 FORMAT(6X,'ASSOCIATED WITH THE MAXIMUM')
      WRITE(2,30)KCC,VCI
   30 FORMAT(6X,'CHAMBER CHALLENGE CONCENTRATION',12X,F6.2,12X,F6.3/)
      WRITE(2,58)
      WRITE(2,32)
   32 FORMAT(6X,'ASSOCIATED WITH THE BASELINE')
      WRITE(2,33)KBC,VBI
   33 FORMAT(6X,'OF THE DEHP RQFT INSTRUMENT',16X,F6.2,12X,F6.3/)
      WRITE(2,34)
   34 FORMAT(6X,'AVERAGE FINAL VOLTAGE')
      WRITE(2,32)
      WRITE(2,33)KBC,VBF
      WRITE(2,34)
      WRITE(2,59)
      WRITE(2,30)KCC,VCF
      WRITE(2,2006)
      WRITE(2,2006)
      WRITE(2,2006)
      WRITE(2,2006)
      WRITE(2,2006)
      WRITE(2,2006)
      WRITE(2,77)
   77 FORMAT(6X,'EXERCISE INTEGRATOR COUNT INFORMATION:'///)
      WRITE(2,78)
   78 FORMAT(6X,'EXERCISE',26X,'INTEGRATOR',3X,'TIME PERIOD',6X,'SAMPLIN
     CG RANGE')
      WRITE(2,79)
   79 FORMAT(6X,37X,'COUNT',5X,'(IN SECONDS)',5X,'SWITCH POSITION')
      WRITE(2,80)
   80 FORMAT(6X,64X,'(AS A PERCENT)'/)
```

```
      IF(SELECT(7).EQ.'2') GO TO 3154
C
C     TRANSFER THE DEHP RQFT INPUT DATA TO ARRAYS TO FACILITATE
C     PF CALCULATIONS
C
      IC(1)=IC1

      IC(2)=IC2
      IC(3)=IC3
      IC(4)=IC4
      IC(5)=IC5
      IC(6)=IC6
      ICTP(1)=ICTP1
      ICTP(2)=ICTP2
      ICTP(3)=ICTP3
      ICTP(4)=ICTP4
      ICTP(5)=ICTP5
      ICTP(6)=ICTP6
      SRSP(1)=SRSP1
      SRSP(2)=SRSP2
      SRSP(3)=SRSP3
      SRSP(4)=SRSP4
      SRSP(5)=SRSP5
      SRSP(6)=SRSP6
      WRITE(2,3051)IC1,ICTP1,SRSP1
 3051 FORMAT(6X,'NORMAL BREATHING STRAIGHT AHEAD',5X,I6,10X,I2,11X,F6.2)
      WRITE(2,3052)IC2,ICTP2,SRSP2
 3052 FORMAT(6X,'DEEP BREATHING STRAIGHT AHEAD',7X,I6,10X,I2,11X,F6.2)
      WRITE(2,3053)IC3,ICTP3,SRSP3
 3053 FORMAT(6X,'TALKING',29X,I6,10X,I2,11X,F6.2)
      WRITE(2,3054)IC4,ICTP4,SRSP4
 3054 FORMAT(6X,'SIDE-TO-SIDE HEAD MOVEMENTS'/
     C'       (DEEP BREATHING)',20X,I6,10X,I2,11X,F6.2)
      WRITE(2,3055)IC5,ICTP5,SRSP5
 3055 FORMAT(6X,'UP-AND-DOWN HEAD MOVEMENTS'/
     C'       (DEEP BREATHING)',20X,I6,10X,I2,11X,F6.2)
      WRITE(2,3056)IC6,ICTP6,SRSP6
 3056 FORMAT(6X,'FACIAL GRIMACING',20X,I6,10X,I2,11X,F6.2//)
      GO TO 3155
 3154 CONTINUE
      IC(1)=IC1
      IC(2)=IC2
      IC(3)=IC3
      IC(4)=IC4
      IC(5)=IC5
      IC(6)=IC6
      IC(7)=IC7
      IC(8)=IC8
      IC(9)=IC9
      IC(10)=IC10
      IC(11)=IC11
      IC(12)=IC12
      IC(13)=IC13
      IC(14)=IC14
      IC(15)=IC15
      IC(16)=IC16
      ICTP(1)=ICTP1
```

```
      ICTP(2)=ICTP2
      ICTP(3)=ICTP3
      ICTP(4)=ICTP4
      ICTP(5)=ICTP5
      ICTP(6)=ICTP6
      ICTP(7)=ICTP7
      ICTP(8)=ICTP8
      ICTP(9)=ICTP9
      ICTP(10)=ICTP10
      ICTP(11)=ICTP11
      ICTP(12)=ICTP12
      ICTP(13)=ICTP13
      ICTP(14)=ICTP14
      ICTP(15)=ICTP15
      ICTP(16)=ICTP16
      SRSP(1)=SRSP1
      SRSP(2)=SRSP2
      SRSP(3)=SRSP3
      SRSP(4)=SRSP4
      SRSP(5)=SRSP5
      SRSP(6)=SRSP6
      SRSP(7)=SRSP7
      SRSP(8)=SRSP8
      SRSP(9)=SRSP9
      SRSP(10)=SRSP10
      SRSP(11)=SRSP11
      SRSP(12)=SRSP12
      SRSP(13)=SRSP13
      SRSP(14)=SRSP14
      SRSP(15)=SRSP15
      SRSP(16)=SRSP16
      WRITE(2,3051)IC1,ICTP1,SRSP1
      WRITE(2,3156)IC2,ICTP2,SRSP2
 3156 FORMAT(6X,'NORMAL BREATHING LEFT',15X,I6,10X,I2,11X,F6.2)
      WRITE(2,3157)IC3,ICTP3,SRSP3
 3157 FORMAT(6X,'NORMAL BREATHING RIGHT',14X,I6,10X,I2,11X,F6.2)
      WRITE(2,3158)IC4,ICTP4,SRSP4
 3158 FORMAT(6X,'NORMAL BREATHING DOWN',15X,I6,10X,I2,11X,F6.2)
      WRITE(2,3159)IC5,ICTP5,SRSP5
 3159 FORMAT(6X,'NORMAL BREATHING UP',17X,I6,10X,I2,11X,F6.2)
      WRITE(2,3052)IC6,ICTP6,SRSP6
      WRITE(2,3160)IC7,ICTP7,SRSP7
 3160 FORMAT(6X,'DEEP BREATHING LEFT',17X,I6,10X,I2,11X,F6.2)
      WRITE(2,3161)IC8,ICTP8,SRSP8
 3161 FORMAT(6X,'DEEP BREATHING RIGHT',16X,I6,10X,I2,11X,F6.2)
      WRITE(2,3162)IC9,ICTP9,SRSP9
 3162 FORMAT(6X,'DEEP BREATHING DOWN',17X,I6,10X,I2,11X,F6.2)
      WRITE(2,3163)IC10,ICTP10,SRSP10
 3163 FORMAT(6X,'DEEP BREATHING UP',19X,I6,10X,I2,11X,F6.2)
      WRITE(2,3053)IC11,ICTP11,SRSP11
      WRITE(2,3164)IC12,ICTP12,SRSP12
 3164 FORMAT(6X,'FACIAL GRIMACING',20X,I6,10X,I2,11X,F6.2)
      WRITE(2,3165)IC13,ICTP13,SRSP13
 3165 FORMAT(6X,'SIDE-TO-SIDE HEAD MOVEMENTS'/
     C'       (NORMAL BREATHING)',18X,I6,10X,I2,11X,F6.2)
      WRITE(2,3166)IC14,ICTP14,SRSP14
 3166 FORMAT(6X,'UP-AND-DOWN HEAD MOVEMENTS'/
```

```
     C'      (NORMAL BREATHING)',18X,I6,10X,I2,11X,F6.2)
      WRITE(2,3054)IC15,ICTP15,SRSP15
      WRITE(2,3055)IC16,ICTP16,SRSP16
 3155 CONTINUE
C
C     CALCULATE THE AVERAGE SCATTERED LIGHT PHOTOMETER VOLTAGE
C     OUTPUT FOR EACH EXERCISE
C
      IF(SELECT(7).EQ.'2') GO TO 3167
      DO 3093 I=1,6
      XC(I)=IC(I)
      XC(I)= XC(I)/(1000.0 * ICTP(I))
 3093 CONTINUE
      GO TO 3168
 3167 CONTINUE
      DO 3169 I=1,16
      XC(I)=IC(I)
      XC(I)=XC(I)/(1000.0 * ICTP(I))
 3169 CONTINUE
 3168 CONTINUE
      ENDFILE 2
      REWIND 2
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
C
C     CALCULATE THE INDIVIDUAL EXERCISE PROTECTION FACTORS
C     USING THE RELATIONSHIP :  PF=(CC)/(RL)
C
C     CALCULATION OF: (CC) IS GIVEN BY:
C
C     (CC)=[(VCI+VCF)(KCC)/2 - (VBI+VBF)KBC/2]
C
C
C
C     CALCULATION OF: (RL) IS GIVEN BY:
C
C     (RL)=[(XC(I)*SRSP(I) - (VBI+VBF)(KBC)/2]
C
C
C
C     NOTE:  SINCE THE LEAK MEASURING SENSITIVITY OF THE DEHP RQFT
C            INSTRUMENT IS ONE PART IN TEN TO THE SIXTH, ANY EXERCISE
C            SCALED INTEGRATOR COUNT VALUE YIELDING A PROTECTION
C            FACTOR GREATER THAN 1.0E+06, WILL BE REPORTED AS
C            1.0E+06.  REPORTING A PROTECTION FACTOR GREATER THAN
C            1.0E+06 WOULD BE ERRONEOUS.  ANY EXERCISE SCALED
C            INTEGRATOR COUNT VALUE YIELDING A PROTECTION FACTOR
C            GREATER THAN 1.0E+06 WILL BE REPORTED AS 1.0E+06.
C
C
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      CC=(((VCI+VCF)*(KCC))/2 - ((VBI+VBF)*(KBC))/2)
      IF(SELECT(7).EQ.'2') GO TO 3173
      DO 3174 I=1,6
```

```
      RL(I)=((XC(I)*SRSP(I))-((VBI+VBF)*(KBC))/2)
      IF(RL(I).LE.0.0) GO TO 9227
      PF(I)=CC/RL(I)
      IF(PF(I).GE.1000000.0) GO TO 9227
      GO TO 3174
 9227 PF(I)=1000000.00
 3174 CONTINUE
      GO TO 9173
 3173 DO 9173 I=1,16
      RL(I)=((XC(I)*SRSP(I))-((VBI+VBF)*(KBC))/2)
      IF(RL(I).LE.0.0) GO TO 4136
      PF(I)=CC/RL(I)
      IF(PF(I).GE.1000000.0) GO TO 4136
      GO TO 9173
 4136 PF(I)=1000000.00
 9173 CONTINUE
C
C     CALCULATE AN OVERALL ARITHMETIC AVERAGE PROTECTION FACTOR FOR
C     ALL EXERCISES
C
      IF(SELECT(7).EQ.'2') GO TO 10
      IDL=6
      IDLP=7
      GO TO 11
   10 CONTINUE
      IDL=16
      IDLP=17
   11 CONTINUE
      KOUNT=0
      PFSUM=0.0
      DO 3060 MT=1,IDL
      KOUNT=KOUNT + 1
      PFSUM=PFSUM + PF(MT)
 3060 CONTINUE
      PF(IDLP)=PFSUM/KOUNT
C
C     CALCULATE AN OVERALL TIME WEIGHTED AVERAGE PROTECTION FACTOR FOR
C     ALL EXERCISES
C
      WPF=0.0
      KKOUNT=0
      PPSUM=0.0
      DO 3194 IMT=1,IDL
      KKOUNT=KKOUNT + ICTP(IMT)
      PPSUM=PPSUM + (PF(IMT)*ICTP(IMT))
 3194 CONTINUE
      WPF=PPSUM/KKOUNT
C
C     TRANSFER THE CALCULATED RESULTS TO THE CALCX.XXX FILE
C
      WRITE(3,3061)
 3061 FORMAT(1H1)
      WRITE(3,3062)
 3062 FORMAT(6X,'THE DESCRIPTIVE AND PROTECTION FACTOR CALCULATIONS:'/)
      WRITE(3,9542)
 9542 FORMAT(6X,'NOTE:  ANY PROTECTION FACTOR THAT IS LISTED AS'/
     C'      1.0E+06 HAS BEEN ASSIGNED THIS VALUE BY DEFAULT'/
```

```
     C'      BECAUSE THE SENSITIVITY OF THIS RQFT INSTRUMENT IS'/
     C'      AT MOST ONE PART IN TEN TO THE SIXTH.  THE INTEGRATOR'/
     C'      COUNT VALUE FOR A PARTICULAR EXERCISE IN QUESTION'/
     C'      IS MERELY REPRESENTATIVE OF INTEGRATING THE ELECTRICAL'/
     C'      NOISE AND THE TRUE PROTECTION FACTOR IS INDEED GREATER')
      WRITE(3,9543)
9543  FORMAT(6X,'THAN 1.0E+06.  ANY EXERCISE SCALED INTEGRATOR'/
     C'      COUNT VALUE YIELDING A PROTECTION FACTOR GREATER'/
     C'      THAN 1.0E+06 WILL BE REPORTED AS 1.0E+06.'//)
      WRITE(3,3176)
3176  FORMAT(1X,' '//)
      TYPE 3062
      TYPE 2006
      TYPE 9542
      TYPE 9543
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      WRITE(3,3046)NAME
      WRITE(3,3047)MASK
      WRITE(3,3048)DATE
      WRITE(3,3049)TIME
      WRITE(3,3176)
      TYPE 3046,NAME
      TYPE 3047,MASK
      TYPE 3048,DATE
      TYPE 3049,TIME
      TYPE 2006
      WRITE(3,3063)
3063  FORMAT(6X,'EXERCISE',29X,'PROTECTION FACTOR'/)
      IF(SELECT(7).EQ.'2') GO TO 3175
      WRITE(3,3064)PF(1)
      TYPE 3064,PF(1)
3064  FORMAT(6X,'NORMAL BREATHING STRAIGHT AHEAD',6X,1PE12.1)
      WRITE(3,3065)PF(2)
      TYPE 3065,PF(2)
3065  FORMAT(6X,'DEEP BREATHING STRAIGHT AHEAD',8X,1PE12.1)
      WRITE(3,3066)PF(3)
      TYPE 3066,PF(3)
3066  FORMAT(6X,'TALKING',30X,1PE12.1)
      WRITE(3,3067)PF(4)
      TYPE 3067,PF(4)
3067  FORMAT(6X,'SIDE-TO-SIDE HEAD MOVEMENTS'/
     C'      (DEEP BREATHING)',21X,1PE12.1)
      WRITE(3,3068)PF(5)
      TYPE 3068,PF(5)
3068  FORMAT(6X,'UP-AND-DOWN HEAD MOVEMENTS'/
     C'      (DEEP BREATHING)'21X,1PE12.1)
      WRITE(3,3069)PF(6)
      TYPE 3069,PF(6)
3069  FORMAT(6X,'FACIAL GRIMACING',21X,1PE12.1)
      TYPE 2006
      WRITE(3,2006)
      WRITE(3,3070)PF(7)
      TYPE 3070,PF(7)
3070  FORMAT(1HO,5X,'OVERALL ARITHMETIC AVERAGE PROTECTION FACTOR'/
     C'      FOR ALL CATEGORIES OF EXERCISES ACTUALLY PERFORMED = '
```

```
     C,1PE8.1)
      TYPE 2006
      WRITE(3,2006)
      TYPE 3195,WPF
      WRITE(3,3195)WPF
3195 FORMAT(1HO,5X,'OVERALL TIME WEIGHTED AVERAGE PROTECTION FACTOR'/
     C'       FOR ALL CATEGORIES OF EXERCISES ACTUALLY PERFORMED = '
     C,1PE8.1)
      GO TO 3177
3175 CONTINUE
      WRITE(3,3064)PF(1)
      TYPE 3064,PF(1)
      WRITE(3,3179)PF(2)
      TYPE 3179,PF(2)
3179 FORMAT(6X,'NORMAL BREATHING LEFT',16X,1PE12.1)
      WRITE(3,3180)PF(3)
      TYPE 3180,PF(3)
3180 FORMAT(6X,'NORMAL BREATHING RIGHT',15X,1PE12.1)
      WRITE(3,3181)PF(4)
      TYPE 3181,PF(4)
3181 FORMAT(6X,'NORMAL BREATHING DOWN',16X,1PE12.1)
      WRITE(3,3182)PF(5)
      TYPE 3182,PF(5)
3182 FORMAT(6X,'NORMAL BREATHING UP',18X,1PE12.1)
      WRITE(3,3065)PF(6)
      TYPE 3065,PF(6)
      WRITE(3,3184)PF(7)
      TYPE 3184,PF(7)
3184 FORMAT(6X,'DEEP BREATHING LEFT',18X,1PE12.1)
      WRITE(3,3185)PF(8)
      TYPE 3185,PF(8)
3185 FORMAT(6X,'DEEP BREATHING RIGHT',17X,1PE12.1)
      WRITE(3,3186)PF(9)
      TYPE 3186,PF(9)
3186 FORMAT(6X,'DEEP BREATHING DOWN',18X,1PE12.1)
      WRITE(3,3187)PF(10)
      TYPE 3187,PF(10)
3187 FORMAT(6X,'DEEP BREATHING UP',20X,1PE12.1)
      WRITE(3,3066)PF(11)
      TYPE 3066,PF(11)
      WRITE(3,3069)PF(12)
      TYPE 3069,PF(12)
      WRITE(3,3190)PF(13)
      TYPE 3190,PF(13)
3190 FORMAT(6X,'SIDE-TO-SIDE HEAD MOVEMENTS'/
     C'       (NORMAL BREATHING)',19X,1PE12.1)
      WRITE(3,3191)PF(14)
      TYPE 3191,PF(14)
3191 FORMAT(6X,'UP-AND-DOWN HEAD MOVEMENTS'/
     C'       (NORMAL BREATHING)',19X,1PE12.1)
      WRITE(3,3067)PF(15)
      TYPE 3067,PF(15)
      WRITE(3,3068)PF(16)
      WRITE (3,2006)
      TYPE 3068,PF(16)
      TYPE 39
  39  FORMAT(1X,////)
```

```
      WRITE(3,3070)PF(IDLP)
      TYPE 3070,PF(IDLP)
      TYPE 2006
      WRITE(3,3176)
      TYPE 3195,WPF
      WRITE(3,3195)WPF
 3177 CONTINUE
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
C
C     CLOSE THE DATAX.XXX AND CALCX.XXX FILES
C
      CLOSE(UNIT=2)
      CLOSE(UNIT=3)
C
C     THE OPTION OF PROCESSING UP TO NINE SETS OF DEHP RQFT DATA
C     DURING A SINGLE COMPUTER RUN CAN BE ACCOMPLISHED
C
   29 TYPE 14
   14 FORMAT(1X,'DO YOU WISH TO CALCULATE PROTECTION FACTORS FOR'/
     C' A DIFFERENT SUBJECT ?   (ANSWER YES OR NO)   ',2X,$)
      ACCEPT 1002,REP
 1002 FORMAT(1A1)
      IF(REP.EQ.YES)GO TO 6000
      IF(REP.EQ.NO)GO TO 28
      IF(REP.NE.YES.AND.REP.NE.NO) GO TO 29
   28 CONTINUE
      TYPE 2006
      TYPE 4137,ICCBS(1),ICCBS(2)
      TYPE 2006
      TYPE 2006
C
C     NOTIFICATION ON THE CRT SCREEN FOR A SUCCESSFUL
C     COMPUTER RUN IS PROVIDED
C
      TYPE 9599
 9599 FORMAT(1X,12X,'JOB SUCCESSFULLY COMPLETED',////)
      STOP
      END
C
C     SUBROUTINE CLEAR IS USED TO ALLOW THE OPERATOR TO MAKE
C     MORE THAN ONE DATA ENTRY ON THE SAME CRT LINE.  THIS
C     SUBROUTINE ERASES THE LINE ON WHICH THE FIRST DATA
C     ENTRY WAS MADE, AND RETYPES THAT LINE, INCLUDING THE
C     FIRST DATA ENTRY; THIS ALLOWS ADDITIONAL DATA ENTRIES
C     TO BE MADE ON THE SAME LINE BY MERELY DEPRESSING
C     THE CRT RETURN KEY
C
      SUBROUTINE CLEAR(LINES)
      BYTE A(3)
      A(1)=27
      A(2)=65
      A(3)=75
      IF(LINES.EQ.0)LINES=1
      DO 1 I=1,LINES
    1 TYPE 4,A(1),A(2),A(3)
```

```
      LINES=0
      RETURN
    4 FORMAT(1H+,4A1,$)
      END
```

ABBREVIATIONS, ACRONYMS, AND SYMBOLS

a.c.	alternating current
AFLC	Air Force Logistics Command
ALC	Air Logistics Center
AMD	Aerospace Medical Division
C	concentration
cm	centimeter
CRT	cathode ray tube
CW	chemical warfare
DB	deep breathing looking straight ahead
DEHP	di-2-ethylhexyl phthalate
DIA	diameter
°F	degree(s) Fahrenheit
FG	facial grimacing
HEPA	high-efficiency particulate air (filter)
Hg	mercury
in.	inch
LASL	Los Alamos Scientific Laboratory
LED	light-emitting-diode
m	meter
MAC	Military Airlift Command
μg	microgram
mg	milligram
min	minute
MMAD	mass median aerodynamic diameter
NaCl	sodium chloride
NB	normal breathing looking straight ahead

ABBREVIATIONS, ACRONYMS, AND SYMBOLS (Cont'd.)

NRL	Naval Research Laboratory
PF	protection factor
$\overline{PF}$	average protection factor
PMT	photomultiplier tube
psig	pounds per square inch gauge
PWR	power
R&D	research and development
RQFT	respirator quantitative fit test
SAC	Strategic Air Command
SAM	School of Aerospace Medicine
sec	second
T	talking
TH	deep breathing and turning head side-to-side
UD	deep breathing and moving head up-and-down
USAFSAM	United States Air Force School of Aerospace Medicine
$\overline{V}$	average voltage
V/F	voltage-to-frequency

☆U.S. GOVERNMENT PRINTING OFFICE: 1982- 569-054/26