

# US MILITARY TEST PROTOCOLS FOR FITPLUS FOR WINDOWS V. 2.XX USED WITH THE MODEL 8020 PORTACOUNT<sup>®</sup> RESPIRATOR FIT TESTER

APPLICATION NOTE ITI-088

This Application Note describes how to create test protocols for FitPlus™ Fit Test Software for Windows that allow your blue TSI Model 8020 PORTACOUNT<sup>®</sup> Respirator Fit Tester to mimic the normal stand-alone operation of the M41 PATS Protective Assessment Test System. FitPlus and the PORTACOUNT fit tester will then perform fit tests with exactly the same test timing, pass/fail levels, and number of exercises as the M41, except that you now have the added convenience of FitPlus for Windows for database storage, reports, and for automating the test.

**VERSION NOTE:** This Application Note applies to FitPlus for Windows versions 2.xx. Users of version 3.xx should use the separate Application Note for that version.

**FIRST RESPONDERS NOTE:** These protocols are for use ONLY by US military organizations who are covered by Military NBC regulations. **They should NOT be used by First Responders** who are using military gas masks. Users who must comply with OSHA and other non-military regulations should use the test protocols specified by the applicable regulations. See OSHA regulations and other TSI Application Notes for more information.

**US MILITARY NOTE:** These US military protocols are in accordance with the TM for the M41 PATS (TM 3-4240-349-12&P) dated 30 November 1999. If anything in this Application Note differs from the TM or from current policy, the TM or current policy has precedence.

You will create new entries in two different FitPlus databases:

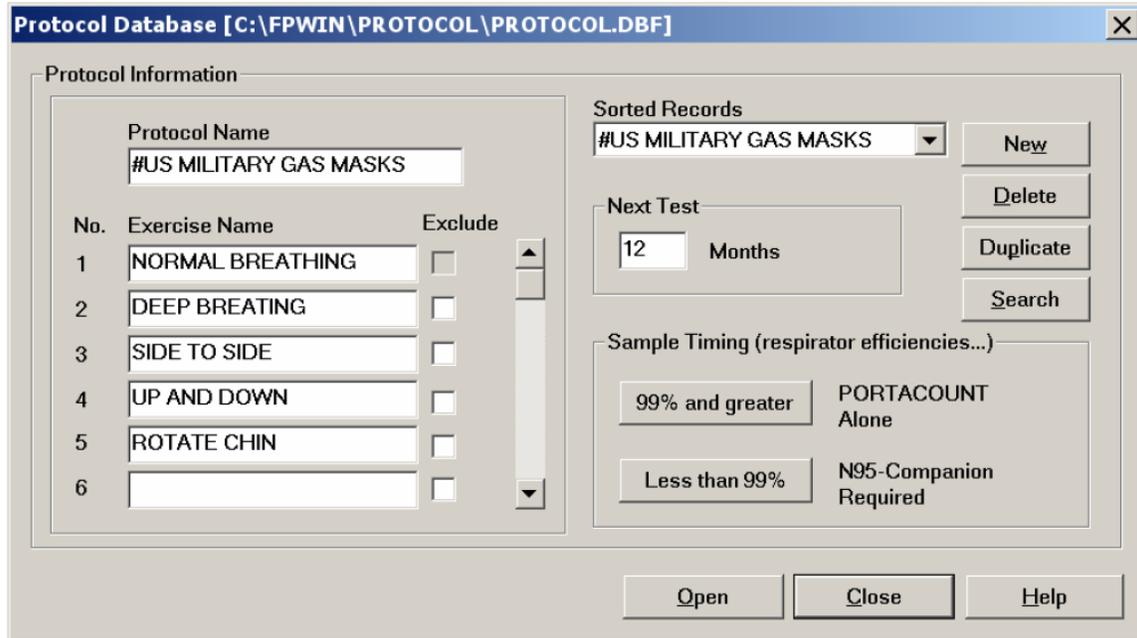
- **PROTOCOL Database:** Change PORTACOUNT exercise timing to mimic the M41 PATS. Specify the required exercises in the US Military test protocol
- **MASK Database:** Identify the specific mask being tested. Specify the minimum pass/fail level required by your regulations.

**NOTE:** A PORTACOUNT fit tester does **NOT** need to be connected to your computer to make these changes.



## Creating New Entries in the PROTOCOL Database

1. Start FitPlus for Windows.
2. Click on the **PROTOCOL** Database icon 
3. Click on **NEW** in the upper right corner.
4. Enter information so your screen looks like this:



No.	Exercise Name	Exclude
1	NORMAL BREATHING	<input type="checkbox"/>
2	DEEP BREATHING	<input type="checkbox"/>
3	SIDE TO SIDE	<input type="checkbox"/>
4	UP AND DOWN	<input type="checkbox"/>
5	ROTATE CHIN	<input type="checkbox"/>
6		<input type="checkbox"/>

**Note:** Using a “#” at the start of the Protocol Name forces this protocol to the top of the pull-down list when you are using the software.

5. Click on the “**99% and greater**” icon.
6. After clicking on the “**99% and greater**” icon you will see this screen. Change the “Mask Sample Time” to 20 seconds for each exercise in order to mimic to timing of the M41 PATS. Do **NOT** change any of the timings in the right hand boxes.

**Sample Timing for PORTACOUNT Alone (seconds)**

Exercises	Mask Sample Time	Total Exercise Time	Mask Purge Time	Ambient Sample Time	Ambient Purge Time
NORMAL BREATHING	20	40	11	5	4
DEEP BREATHING	20	40			
SIDE TO SIDE	20	40			
UP AND DOWN	20	40			
ROTATE CHIN	20	40			

Total Test Time: 03:20 mm:ss

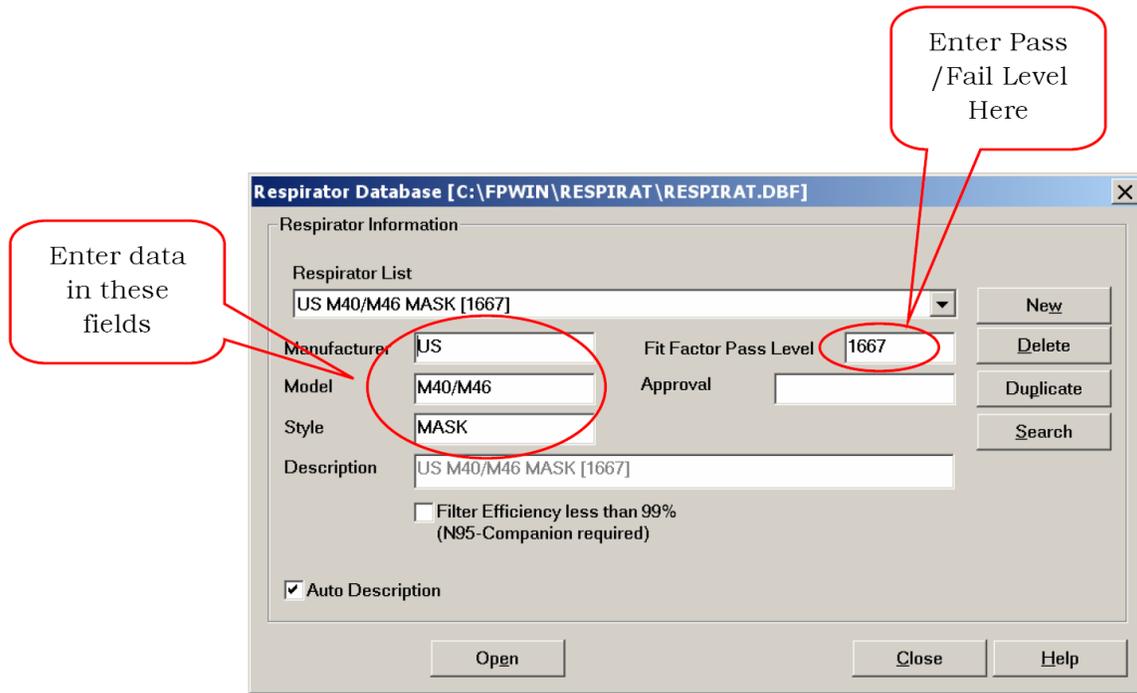
Note: Total Exercise Time = Mask Sample + Mask Purge + Ambient Sample + Ambient Purge

Buttons: OK, Cancel, Help

7. Click on “OK” to return to the PROTOCOL Database screen.
8. On the PROTOCOL Database screen, click on “Close”.

## Creating New Entries in the RESPIRATOR Database

1. Click on the **RESPIRATOR** Icon .
2. The primary purpose of creating this entry is to specify the **Pass/Fail level** for a **specific mask** in a **specific application**.
  - a. The most important field is the Fit Factor Pass Level. You will need to enter the Pass/Fail Level required for your specific application. Check with your NBC officer
  - b. You can **only enter data** in the “Manufacturer, Model, Style, and Fit Factor Pass Level fields. The software creates the description for the pull-down list from this data. This data only affects the text in the pull-down menu and in certain reports
  - c. If you will be testing several types of masks with different Pass/Fail levels, simply create a different RESPIRATOR entry for each on.
3. The screen shown below shows a typical entry.



4. Click on “**C**lose” to exit the RESPIRATOR Database.
5. Your FitPlus for Windows now has US military test protocols, masks, and fit factors. When used with these new entries, your BLUE PORTACOUNT fit tester will exactly mimic the M41 PATS in its normal stand-alone mode.



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