



**PROJECT MANAGER SOLDIER EQUIPMENT
IMPROVED OUTER TACTICAL VEST (IOTV)
SIZING AND FITTING PROCEDURES**



SFAE-SDR-SEQ

21 April 2009

MEMORANDUM FOR INFORMATION

SUBJECT: The Improved Outer Tactical Vest Sizing and Fitting Procedures

Improved Outer Tactical Vest Fitting Procedures: The following steps are required by PM SEQ Fielding and Fitting personnel to determine the proper size IOTV for individual Soldiers. The steps begin when the Soldier approaches the IOTV Fitting Station and does not account for preparation or management of the fitting station or New Equipment Training (NET). The steps are conducted for each individual Soldier regardless of the traffic flow or volume established by the Fielding Team Lead. *Note: ALL IOTV's at the Fitting Station will have Ballistic Plates properly inserted in the vest.*

This includes: One set of E-SAPI (front and back) and one set of E-SBI (left and right). Soldiers will not be sized in the IOTV without inserted body armor.

PM SEQ Personnel assigned to the IOTV Fitting Station will:

1. Have the Soldier stand in front and face toward the sizing personnel.
2. Observe the build and height of the Soldier – note if the Soldier tends to be tall (6 feet or taller) and/or tends to have a stocky or thin build.
3. Ask the Soldier their current OTV size – have the Soldier try on an IOTV based on their corresponding OTV size.

Note: Fielding personnel can suggest an IOTV size based on their observation of the Soldiers build and frame.

4. Assist the Soldier in donning the IOTV using the “over the head” method – ensure the ballistic collar is lying properly along the shoulders, neck and back. It should lie smoothly without any bulking or bunching. Then secure the shoulder strap by reaching back and grabbing the strap, pulling it forward and connect to the Velcro, then through the metal loop and fasten to the button.

5. Close the vest around the Soldier fully by first fastening the Internal Elastic Waistband (**Figure 1**), followed by the Left and Right Side Plate Carriers (**Figure 2**). The hook and pile on each component should lay flush and square to one another. Close the front panel cover (**Figure 3**).

Internal Waistband



Figure 1

Left and Right Side Plate Carriers



Figure 2

Front Panel Cover



Figure 3

6. Ensure the sides of the Front Carrier and Back Carrier are lying properly around the Soldier's torso. The sides should overlap and lay smoothly without bulking or bunching.
7. Turn the Soldier around and open the Rear Panel Cover.

Adjust the Side Plate Carriers by pulling on the upper adjustment straps first followed by the lower adjustment straps. Pull the straps according to the comfort level and evenness indicated by the Soldier (**Figure 4**). Also ensure the ESBI side plates are centered on the side of the body.

Adjustment Straps

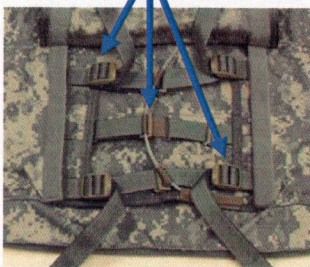


Figure 4

NOTE: Ensure the Side Plate Carrier adjustment straps are loosened prior to donning the vest.

8. After adjusting the Side Carrier Straps, ensure the Left and Right Carriers lay under the Carrier Channel. This will allow for additional adjustments if the Soldier's weight increases or decreases.

Note: There should be **NO** exposed straps or buckles showing from the Carrier Channel after adjustments are made (**Figure 5**). If so, re-size and fit the Soldier in a larger vest.

9. Have the Soldier face toward you to check size, comfort and mobility by asking the Soldier to move arms in a circular motion, then in a running motion, execute some deep knee bends and lift one knee up at a time.

10. Have the Soldier sit upright in a chair, visually check to ensure the vest is not rising off the shoulders, the vest should rest flush on the shoulders. Ensure that the front

No Exposed Straps



Figure #5

No rising off the shoulder/
Or pressure on the legs



Figure #6

Belt Line Belly Button



Figure #7

bottom edge on the vest/front plate is not placing pressure down on the Soldiers legs (**Figure 6**). If so, re-size and fit the Soldier in a smaller vest.

11. Have the Soldier stand with their body straight; visually check the length of the vest to ensure that the front bottom edge of the Front Carrier falls between the belly button and the belt line (**Figure 7**). If not, re-size and fit the Soldier with a larger/long vest.

Note: If the Soldier is tall and/or has a long torso, check that the stomach area is covered, by ensuring that the bottom edge of the Front and Back Carrier falls between the belly button and the belt line. If not, re-size and fit the Soldiers with a longer vest (The longer size vest will provide three (3) additional inches of coverage).

12. Visually check the side panels of the Front and Back Carrier to ensure they overlap a minimum of (1) inch to provide complete side protection (**Figure 8**). If not, re-size and fit the Soldier with a larger vest. (Remember the IOTV has a higher ballistic cut which eliminates the auxiliary protector)

13. Visually check the Wing Channels and the rear portion of the Side Plate Carriers after adjustment, to ensure there are no gaps between the Wing Channel and the rear portion of the Side Plate Carrier after adjustment (**Figure 9**). If so, re-size the Soldier in a larger vest.

Front and Back carrier
soft ballistic overlap



Figure# 8

No Gap between wing channel
and rear of the side plate carrier



Figure #9

14. Visually check the overall size/fit of the vest to ensure that there are no exposed areas of the torso (lower neck, under arms, lower front and back torso areas). If so, re-size the Soldier in a larger or larger/long vest.

15. Visually check the overall size/fit to ensure that the vest is not too big for the torso. If so, re-size the Soldier in a smaller or smaller/long vest.

Note: ALL Soldiers must be sized / fitted for their IOTV vest and go through these procedures **(NO EXCEPTIONS)**.

Additional Notes:

- When attaching the Side Plate Carrier, the hook and pile on each component should lay flush and square to one another.
- Position plates at their highest points, any subsequent adjustment can be made thereafter.
- When the IOTV is worn and adjusted correctly, there is at least a 1" inch overlap of fabric where the Front and Back Carriers joins at the shoulder.
- Make sure the Quick Release Cables are routed through the two grommets of the Cable Stop to prevent a malfunction.
- Ensure the appropriate size Quick Release Cables is used for the selected vest size.
- When connecting Front Carrier to the Rear Carrier at the shoulders, do not include the two straps with buckle on the end for Land Warrior System attaching.
- Ensure the Side Plate Carrier strap has an additional turn through the buckle for added security.
- Do not to include the flap of the Rear Yoke when attaching the Deltoids to the IOTV or this may prevent the quick release from operating correctly.
- When attaching the Side Carrier to the Front Carrier, place hook material squared on the pile material of the Front Carrier. "Do not overlap"
- When activating the Quick Release, never allow the Ballistic Plates (HARD ARMOR) to fall on a solid surface.
- The Quick release system is only to be used in an emergency situation; the only exception is when conducting peace time training.

DO NOT assume that any particular vest will fit any Soldier without them trying it on and going through these procedures. **NO EXCEPTIONS.** The PM SEQ Fielding and Fitting personnel will not compromise safety of the Soldier for comfort of the IOTV.