



## **SOLDIER LOAD-BASED MISSION PLANNING AID FOR THE TACTICAL SMALL UNIT (INFANTRY COMPANY AND BELOW) | TSPID**

### **SUMMARY:**

The Soldier Load-Based Mission Planning Aid for the Tactical Small Unit (TSU) will provide a leadership guide for better informed decisions during mission planning course of action (COA) development regarding physical, cognitive, and social aspects of the human dimension (HD). This assessment tool will give TSU leadership fingertip access to personnel status (PERSTSATS +), equipment loading and cross-loading capability from unit equipment lists and LOGSTATs, weather and light data, route planning facilitation, threat data, and human performance estimation. Predictive models and tables will be included and added in modules as the science becomes available. Current efforts are underway to find the best human performance algorithms available for predictive models and to mature currently available HD mission related information.

### **WHY IS IT NEEDED:**

Today's Soldiers are overburdened with loads that far exceed doctrinal weight. The load may provide increased protection and temporarily greater situational awareness, communications and lethality capabilities; however it also reduces agility of the TSU and causes acute and chronic injuries, negatively impacting combat effectiveness and unit readiness. The ability to predict Soldier/human performance during the mission planning process will assist the TSU commander and subordinates with maintaining a higher state of readiness and mission capability by reducing long term fatigue and injury. While the performance of the carried individual technologies is well documented, the degree to which they affect warfighter system capability has not been determined unequivocally. Rapid responses to operational requirements have necessarily precluded in-depth trade analysis during wartime. The interactions between load/technology and survivability, lethality, situational awareness, and mobility are not severable. These metrics interact dynamically to allow or preclude optimal warfighter system capability and readiness. These trades must be known in order for operational commanders, acquisition officers, and equipment developers to make the best decisions in terms of the warfighter himself, not simply on technology performance.



### **SOLDIER PAYOFF:**

The TSU leadership will have the ability to generate faster and better informed COAs with integrated human dimension considerations. Order generation (e.g. CONOP, WARNO, and OPORD) and approval will be expedited granting leadership more time for detailed planning and rehearsal. This will lead to a higher level of readiness and percentage of mission capable Soldiers while reducing long term fatigue and injury during deployments and training. Collectively the modules will assist TSU leadership through better informed mission planning, daily and weekly reporting,

**UNCLASSIFIED**