

**THE HISTORY OF**

**IM STANDARDS**

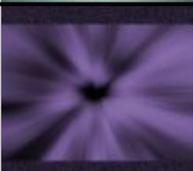
# Today's IM Standard Tests

	Threat	Passing Criteria	Comments
FCO	 Liquid Fuel Fire	Burning	<b>HC Relation</b> : Required for hazard classification <b>Stimulus</b> : Rapid heating response <b>Comments</b>
SCO	 Slow Heating 3.3 °C/Hr	Burning	<b>HC Relation</b> : Required for reduced hazard class <b>Stimulus</b> : Slow heating response <b>Comments</b> : Additional technical studies appropriate
BI	 .50 Cal M2AP 3 round burst	Burning	<b>HC Relation</b> : Required for reduced hazard class <b>Stimulus</b> : Low level kinetic impact <b>Comments</b> : Relevant small arms threat More severe threats exist Additional studies appropriate
FI	 18.6 gram fragment  8300 +/- 300 fps	Burning	<b>HC Relation</b> : Not required <b>Stimulus</b> : Combine shock, mechanical, thermal <b>Comments</b> : Artillery fragments slower Some KE and EFP threats more severe
SR	 Detonation of a single donor	Explosion	<b>HC Relation</b> : Required for hazard classification <b>Stimulus</b> : Output of a like munition <b>Comments</b> : Does not address mixed storage Does not address multiple donor
SCJ	 81-mm Precision shaped charge	Explosion	<b>HC Relation</b> : Not required <b>Stimulus</b> : Shock <b>Comments</b> : More severe threats exist Pragmatic threat considering technology potential

# In the Beginning.....

	Threat	Passing Criteria	Comments
CBI 	Flying Cannon Balls	Burning	The standard had always used the 8 lb ball but the Navy later introduced the 12 lb ball due to the increased damage to the Ships hulls. Could not control velocities
CBP 	High Velocity Arrows	No Reaction Upon Puncture	The standard required the use of the Binford AAP Model 520C with an arrow width of 1/2", using a forged armor piercing metal tip.
CPT 	Slippage During Launch	No Reaction upon Impact	The standard did not call out any specific model # but it did specify the tension needed to throw a standard man over 74 ft
HRD 	Transportation Hazards	No serious Breakage	The standard called for the use of a horse that is least 15 hands tall with ability to pull a medium caliber cannon at 25 mph
HOCO 	Thermal Heating	Explosion	The called for the oil to have a viscosity of at least 50 Cp at a temperature of 300° C and must cover tested item

# What will the Future bring.....

		Threat	Passing Criteria	Comments
LBCO		Thermal Heating	Burning	The standard will use the AF Airborne Laser System firing from the Space Station at 250,000 ft for a duration of 15 sec
PTB		High Velocity Frags/Blast	No Explosion	The standard allows the use of the model no. NCC 1701C, detonated with a CEP of 1,000 ft
WSTS		Long-Term Thermal Heating	Item must still be Servicable	The Warp speed must initially be at 1.5 for 6 hours, then increasing at a rate of .5 per day for 6 days
WHD		Ultra-High Speed Transportation	No Time/Space Distortion	The Worm Hole must cover a distance of 7 par-sects (23 light years @ warp 5)
AMC		Storage Hazards	Explosion	The test procedure requires exposing the test item to unshielded anti-matter for a duration of 15 min

# Then

# Now

# Soon

<b>CBI – Cannon Ball Impact</b>	<b>FCO – Fast Cookoff</b>	<b>LBCO – Laser Beam Cookoff</b>
<b>CBP – Cross Bow Puncture</b>	<b>SCO – Slow Cookoff</b>	<b>PTB – Photon Torpedo Blast</b>
<b>CPT – Catapult Throw</b>	<b>BI – Bullet Impact</b>	<b>WSTS – Warp Speed Thermal Stability</b>
<b>HRD – Horseback Run Drag</b>	<b>FI – Fragment Impact</b>	<b>WHD – Worm Hole Distortion</b>
<b>HOCO – Hot Oil Cookoff</b>	<b>SR – Sympathetic Reaction</b>	<b>AMC – Anti-Matter Contamination</b>
	<b>SCJI – Shape Charged Jet Impact</b>	