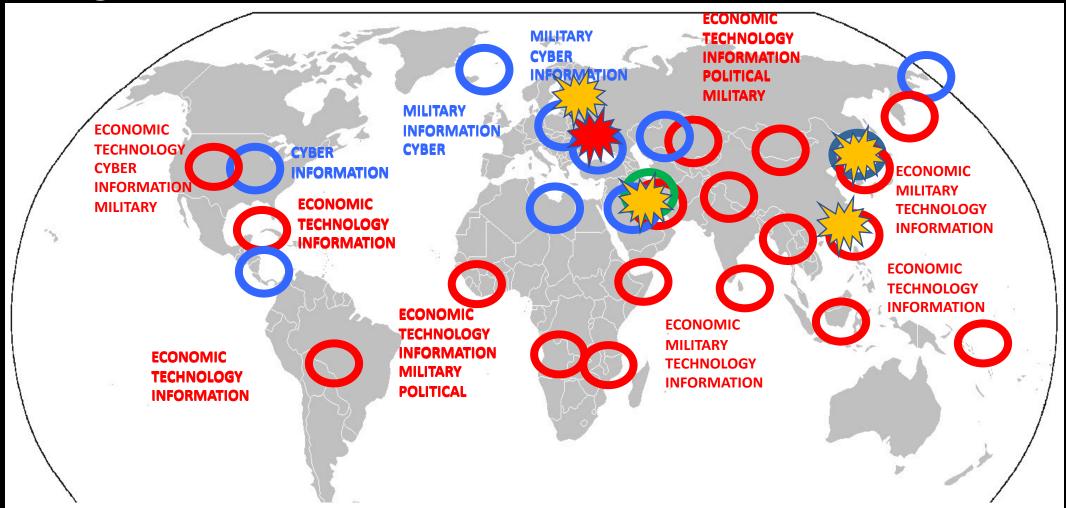
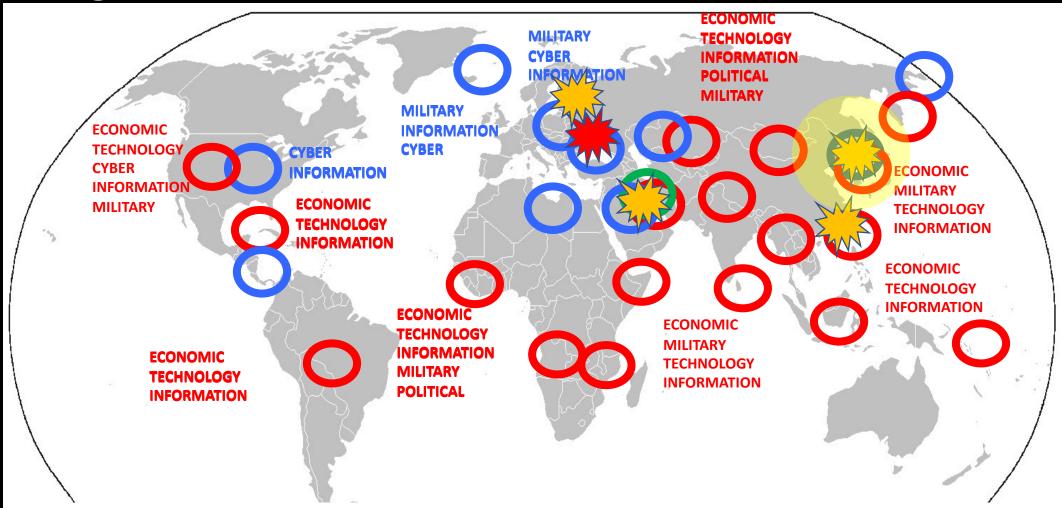


- Strategic Environment
- The enduring imperative initial impressions from Ukraine
- Some challenges facing the fires enterprise
- The way ahead make technology work for you

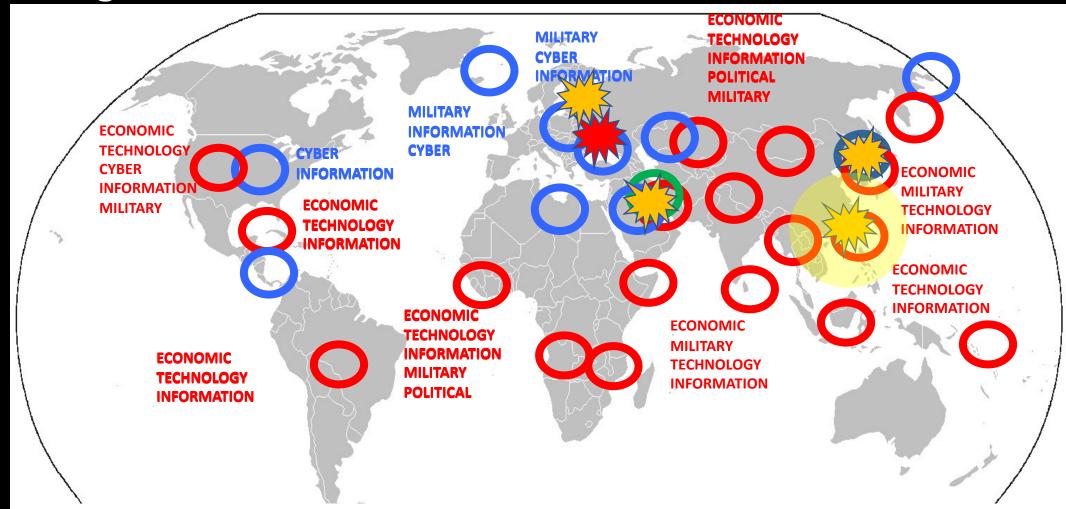
Strategic Environment



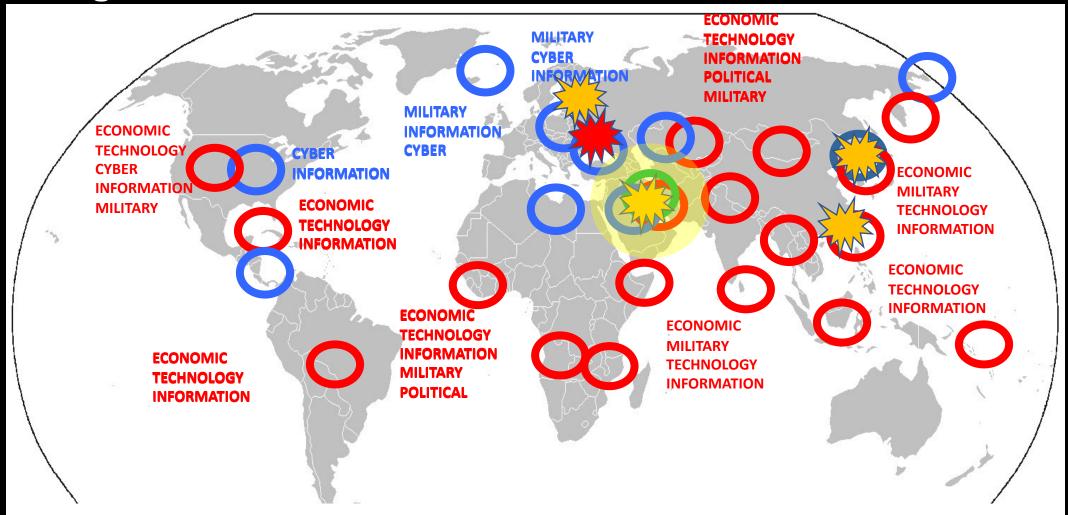
Strategic Environment



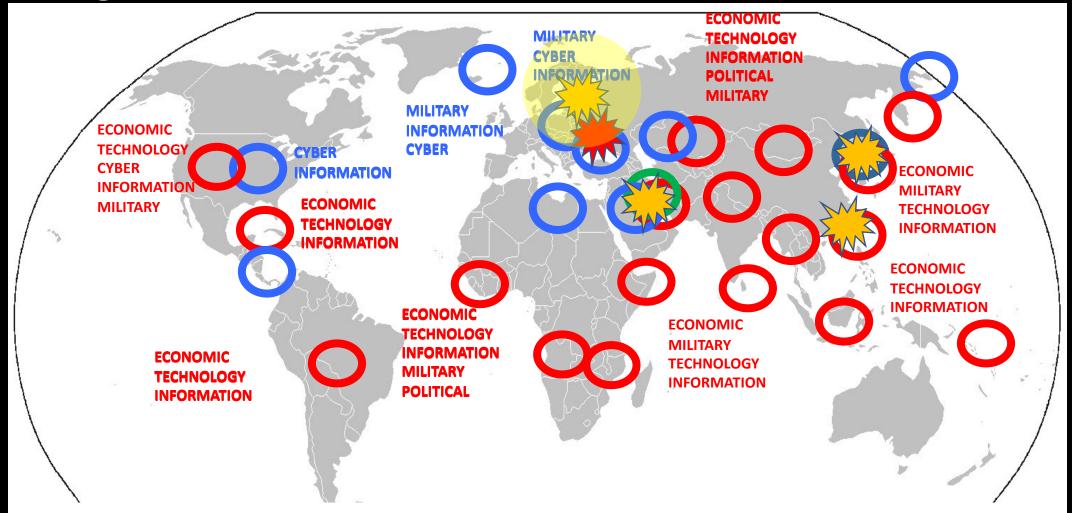
Strategic Environment



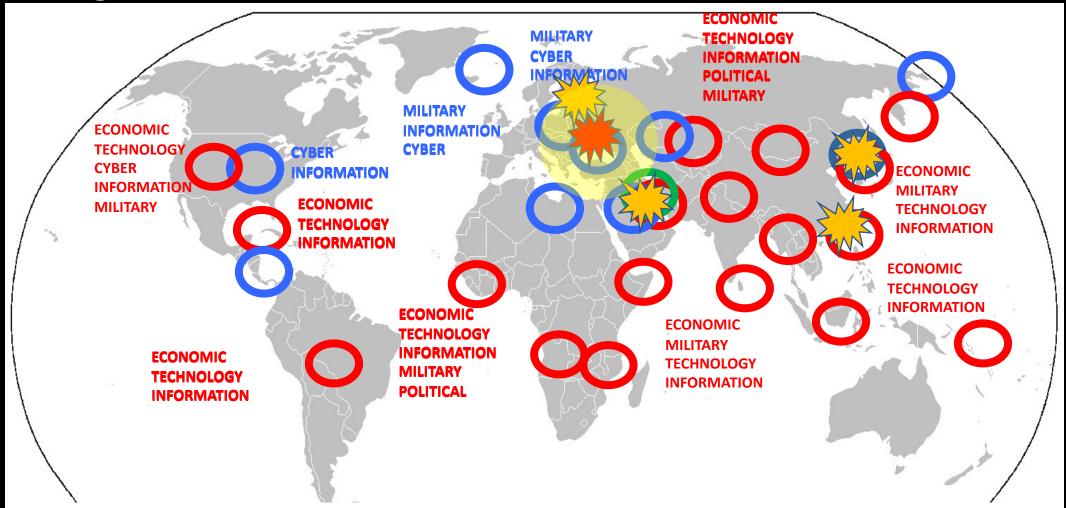
Strategic Environment



Strategic Environment



Strategic Environment



"As a senior adviser to General Valerii Zaluzhnyi, commander of the Armed Forces of Ukraine, noted, 'antitank missiles slowed the Russians down, but what killed them was our artillery. That was what broke their units'."

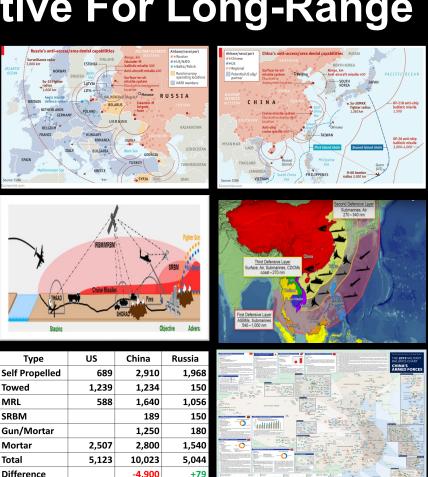
"Operation Z: The Death Throes of an Imperial Delusion" RUSI

Artillery remains the King of Battle

Artillery remains the King of Battle ... But faces challenges with

- Range
- Speed
- Scale
- Endurance
- Survivability
- Sustainability

To remain the King...Meet these challenges



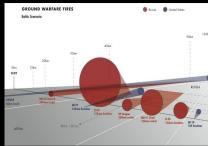
Гуре	US	China	Russia	Management of the state of the	
ropelled	689	2,910	1,968	ACCEPTANCE OF THE PROPERTY OF	Gu
 d	1,239	1,234	150		Vietnar
	588	1,640	1,056		Korea World
	300	189	150		Worl
					Spanish-Americ
Mortar		1,250	180		Cir
ar	2,507	2,800	1,540		Mexican-America
	5,123	10,023	5,044		War o Revolutiona
ence		-4,900	+79		
The Military Balance: 2022 (IISS)					

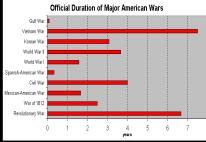


The law and the la		Part In In					
Category / Munition	155mm (294)***	60 days***	MLRS (189)***	60 days***			
Stockpile Est****	9,130,000						
Planning Est	120***	2,116,800	4.9*	56,700			
Desert Storm	30*	52,200	1.4*	15,876			
Ukraine Est	180*&****	3,175,200	6.5*&*****	73,710			
"RWID "FMIOT-L-1/QIDS rate of 17% x4] ""Current Ultraine duration assuming DS tauncher allocation ""2005 estimate (DPICM extrapolation) """OffiDel Average ISO of US allocation to Ultraine """Extrapolation based on OffiDel Ave & Planning Est (33)							

Illustrative, not Authoritative









• Make technology work for you ... Energetics



Make technology work for you ... Automation



2-CT Hawkeye 105mm Mobile Howitzer System

Caesar 155mm Artillery System

The US is contested globally by peer and near peer adversaries and faces dangerous regional flashpoints and ongoing conflicts that challenge the US at speed and scale

Threats posed by China, Russia, and others and insights from recent conflicts and combat underway in Ukraine confirm the imperative for and challenges to long-range fires

Meeting the immediate challenges of range, speed, scale, endurance, survivability, and sustainability, and those to come, requires we proliferate more systems that are

- More mobile, more lethal, and cost-effective
- Fire at greater range, are networked across platforms, munitions, and sensors at those extended ranges, and
- Operate dispersed, with reduced crews, greater munition options, and deeper, on-board magazines of smaller, more effective munitions

Efforts to modernize the artillery enterprise should focus here: more "guns," more, smaller ammunition, and smaller crews to provide more, more mobile, significantly more effective, and operationally, logistically, and programmatically efficient systems

Act now. Programs to meet these changes are late to need