

China has had a mixed record of using artillery for military and political-military goals. Its successes as when it routed Indian forces in 1962 with the high-altitude use of artillery and mortars, have been offset by incidents provoking third-party responses or leading to regional standoffs. Examples include the shelling of islands controlled by Taiwan in 1955-58, resulting in U.S. intervention and a stalemate over the Taiwan Strait. In July, a unit based in the Nanjing military region fired missiles from 300-mm. PHL-03 multiple rocket launchers (MRLs) into the Yellow Sea to show China's anger at U.S. naval exercises with South Korea. The exercises, a result of China-backed North Korea's sinking of the South Korean frigate Cheonan in March, went ahead anyway.

China evolution as an artillery power stems from Soviet and Russian influences dating to the Korean War Soviet artillery and training improved PLA artillery operations during the war and led to the formation of the first formal artillery command. Soviet aid continued through the 1950s, and by the time of the Sin-Soviet split of the 1960s, China was producing copies or modified versions of Soviet pieces.

The PLA makes extensive use of Soviet-origin 152-, 130- and 122-mm. calibers, though Western calibers such as the 155- and 105-mm. are seeing greater use. China purchased the Russian 9A52 Smerch 300-mm. MRL in the 1990s, and the PLA produced a near facsimile in the A-100/PHL-03 MRL. The 155-mm. PLZ-05 self-propelled artillery system that emerged in 2005 bears an uncanny resemblance to the Russian 2S19 MST-A.

In the 1990s, PLA artillery was affected by reforms in strategy (its closest concept to doctrine) and organization. Toward the end of the decade, the PLA was immersed in strategy goals of "informatization" and "mechanization." The former included the broad application of improving information technologies, which for artillery included new computer-based fire controls and ever-improving digital communication and command linkages. PLA artillery units increasingly include firefinding counter-battery radar such as the 50-km.-range (31-mi.) SLC-2 and Type 704, and use sophisticated electronic warfare systems such as the Russian SPR-2 radio fuse jammer, a possible Chinese facsimile and possibly a recently revealed artillery radar jammer. Artillery recon vehicles and recon troops feature advanced optronic and digital communication capabilities. In addition, PLA artillery units have sophisticated meteorological capabilities and use muzzle velocity radar to improve accuracy.

Mechanization put renewed emphasis on developing tracked and wheeled self-propelled tubed artillery, with rocket artillery largely truck-mounted. This trend was emphasized in late 2004 when Chinese Communist Party and PLA leader Hu Jintao enunciated the PLA's new "historic missions," a euphemism for invasions, which call on the PLA to defend state interests abroad. It is likely that new medium-weight artillery systems based on airmobile armored personnel carriers will follow for these strategic missions.

Organic PLA artillery units have decreased in size, following the pattern of general large-scale troop reductions. When combined with "informatization" advances, this will permit many infantry and armored divisions to be reformed into mechanized brigades. However, in a counter-trend that emphasizes their continued importance, the PLA maintains five independent artillery divisions and 20 independent brigades. Of these, two divisions and six brigades are stationed in the Shenyang and Beijing military regions, for potential Korean contingencies. Three divi-

sions and eight brigades are in the Nanjing Guangzhou and Jinan military regions, for Taiwan contingencies.

Among artillery systems, mortars include a 60-mm. hand-held system used by infantry and special forces. The new Type 93 60-mm. fixed mortar weighs 22.4 kg. (49.2 lb.) and fires 20 rounds/min. to 5.5 km. There are also fixed W91 and W87 81-mm. mortars that fire to 8 km. and 5.6 km., respectively. The PLA has largely copied Russia's Vasilyek 81-mm. automatic mortar, called the W99 or SM-4, which comes in a towed version or mounted in a Hummer-like vehicle. It fires four rounds in 2 sec. out to 6.2 km. The W86 120-mm. towed mortar weighs 206 kg. and fires 20 rounds/min. to 4.7 km.

In 2001, the PLA revealed the PLL-05 mobile mortar based on the Russian 120-mm. 2S23 NONA-SVK that it purchased in the 1990s, but mounted on a WZ-551 6 X 6 armored personnel carrier (APC). It fires a rocket-assisted round 13.5 km. In 2007, the PLA revealed a laser-guided 120-mm. mortar round, though it is not clear if it is in service.

Towed and self-propelled tubed systems dominate artillery units. The largest number of towed guns are likely the 122-mm. versions. These include the Type-96, based on the Russian D-30, with a 360-deg. traversing base, and the simpler Type-83. Their rocket-assisted rounds have a 27-km. range. The Type-59 130-mm. towed gun fires a rocket-assisted round 44 km. Of heavy towed artillery, the 152-mm. Type-66, a copy of the Russian D-20, is most numerous and fires rocket-assisted rounds 28 km. In 1999, the PLA revealed the 155-mm. PLL01/WA 021 towed artillery system, based on the Austrian Norinco GH N-45, which fires a rocket-assisted round 50 km. The PLL01 and the Type-66 fire 155- and 152-mm. versions of the Russian Krasnopol laser-guided shell.

Self-propelled tubed artillery includes the PLL02, which places the Type-86 100-mm. gun on a WZ-551 APC. In 2009, the PLA revealed the new Type-07 122-mm. tracked artillery system, which features hull and electronic improvements over the previous Type-89 Tracked 122-mm. system. In 2009, photographs appeared on the Internet of the SH-3, a truck-mounted 122-mm. artillery system with digital control systems in a hatch over the cab.

Heavy self-propelled systems include the 155-mm. PLZ-05, which has a version of the PLL01 gun, and appeared in 2005. It is replacing the 152-mm. Type-83, which entered service in 1983. The PLZ-05 also fires the Krasnopol laser-guided projectile and a rocket-assisted round 50 km., and is capable of flat-trajectory antitank fire. Unconfirmed reports state the PLZ-05 has an automatic gun-loading system and weighs 35 tons.

PLA investments in rocket artillery are impressive. A five-wheel all-terrain vehicle has been modified to carry a 107-mm. MRL for experimental mechanized special forces units. The tracked Type-89 and more recent Type-90 truck-mounted 122-mm. MRL feature self-contained 40-round rocket reloaders. In addition, the Smerch-derived 12-round PHL-03, which reportedly fires a 150-km.-range missile, is entering increasing numbers of artillery units. The latest AR1A export variant features a modular U.S. MRL system-style 5-round rocket carrier, which speeds reloading. In 2009, Norinco revealed an as yet unidentified truck carrier for this 5-round rocket box, similar to Lockheed Martin's High-Mobility Artillery Rocket System.

The PLA is also investing in larger MRL systems. The 400-mm. WS-2D reportedly has a range of 400 km., and one payload features three "killer unmanned aerial vehicles," according to a Chinese report. An earlier 200-km.-range version, the WS-3, uses navigation satellite guidance to achieve a remarkable

50-meter (164-ft.) circular error probable. The WS family complements the 150-km.-range P-12 and 250-km. B-611M maneuverable navsat-guided short-range ballistic missiles (SRBMs), which could supplement or replace the PLA's two brigades of 300-600-km. DF-11A SRBMs.

New artillery systems are entering amphibious and airborne units for possible missions abroad. PLA marine and army amphibious units are receiving the Type-07B tracked 122-mm. amphibious artillery system, which places the gun from the Type-07 on a larger hull. Airborne units are equipped with a version of the Type-96 122-mm. gun, but a new tracked airmobile APC may feature a mortar or gun system. The ZBD-09 122-mm. gun system could eventually feature in airmobile army units. Future artillery systems may feature electromagnetic launch, an area of extensive research. The PLA is also interested in ramjet-powered and stealth-coated artillery shells.

SUDAN

Mr. KERRY. Mr. President, in just over 100 days, Sudan will face a defining moment. The choices its leaders make can lead to a peaceful two-state solution. Or, as many fear, they could result in a return to chaos and war in a place too often synonymous with both.

Responding to this urgency, the Obama administration has recently launched a heightened campaign of diplomatic engagement with both North and South Sudan to help the parties to find their way through this process. I traveled to Sudan in April 2009 and I have met with Sudanese from all parts of the country since that time, including Salva Kiir, the leader of Southern Sudan, last week. Today, joined by Senators BROWBACK, DURBIN, WICKER and FEINGOLD, I am introducing legislation known as the Sudan Peace and Stability Act. Congress must not be silent at this critical time.

On January 9, 2011, the people of Southern Sudan and the adjoining territory of Abyei are scheduled to hold referenda on secession. Realistically, Sudan's choice is no longer between unity and separation—southerners have apparently made that decision. Every reliable source indicates that they will vote for separation, dividing Africa's largest country and taking with them some eighty percent of known Sudanese oil reserves. The Secretary of State has called a vote for separation inevitable. No, the choice before the peoples of Sudan is that between a future of peaceful coexistence or a return to the country's bloody past.

The Sudanese, both North and South, set out on this path when they signed the 2005 Comprehensive Peace Agreement. The CPA brought to a close a war that had raged for two decades and claimed millions of lives. And it offered Southern Sudan the promise of a choice in 2011 between continuing unity and separation from the Sudanese government in Khartoum.

The landmark agreement ended the war, but it intentionally postponed the

tough decisions about the modalities and meaning of 2011. In theory, the six intervening years were intended to solidify connections between former enemies. But not enough was done to build those ties, and the death of South Sudan's most forceful voice for unity, Dr. John Garang, further diminished unity's prospects. For champions of separation, the time period meant a deferral of their dream of independence that has now come due. But this intervening period has also served one crucial purpose: It has demonstrated that North and South can live side by side in peace.

With January fast approaching and progress scant on the mechanisms for division, the two sides are almost out of time to craft a peaceful transition. To fulfill the full promise of the landmark 2005 peace agreement, they must negotiate terms of separation and prepare for a future in which they remain fundamentally connected.

Southern Sudan possesses most of the known petroleum reserves, but the pipelines to market for that oil run through the north. An estimated million and a half southerners displaced by the war live in Khartoum and may well remain there, and northerners will live in the South. Every dry season, herders from the north's Arab Misseriya tribes cross into what will likely become the country of Southern Sudan and then return. The Nile will continue to flow northward, irrespective of borders and politics. Boundaries must simultaneously be demarcated and accommodating. And the parties need to finalize the details fast enough to ensure that violence cannot fill the vacuum.

The last war between North and South lasted for decades and claimed millions of lives. And, earlier this year, then Director of National Intelligence Dennis Blair told Congress that, over the next five years, Southern Sudan is the place where "a new mass killing or genocide is most likely to occur."

America acted as one of the architects of the CPA in 2005, and has a moral obligation as well as a strategic interest in helping the parties to see it through. The Sudanese must make the decisions, but we—and others—can help them navigate this process. Failure to act now—whether by high level diplomatic engagement, scenario planning for a variety of potential outcomes, and pre-positioning humanitarian supplies in the region—may contribute to a larger crisis later.

While we try to prevent the next potential wave of genocide, we cannot ignore the fact that Darfur's tragedy remains unresolved. Even as America asks how it can help Southern Sudan prepare for the likely burdens of statehood, it must also consider the Sudan that remains and Darfur's need for peace, stability, and justice. Attention to Darfur must not be a casualty of our necessary fixation on the North-South crisis.

The goals of the legislation are:

1. To spell out clearly the objectives of U.S. policy and the bilateral and multilateral tools available to pursue them;

2. To emphasize the need for all parties to commit to see the CPA through the January referenda and beyond;

3. To underscore the importance of Darfur and to provide policy guidance on both the peace process and the humanitarian situation;

4. To lay the legal groundwork, spur the humanitarian planning, and shape the policy framework in the likelihood of secession; and

5. To strengthen both capacity building and accountability.

Our bill offers a number of specific prescriptions, including the designation of a senior official to work with the Special Envoy to Sudan by heading up the U.S. team in the Darfur peace process, much as Ambassador Princeton Lyman is currently doing in Juba in the South. The legislation also seeks to strengthen multilateral efforts to build capacity in the South and aid implementation of the CPA.

In approaching Sudan we are rightly concentrating for the moment on the things that the parties must do between now and January 9, 2011, from registering voters for the referenda to coming to terms on major issues such as citizenship, oil, debts, and the border territory of Abyei. But we must also look beyond January as well. Much has to be done between January and July 2011, when, under the terms of the CPA, Southern Sudan and Abyei are to become independent if that is the outcome of the referenda. But even more importantly, we have to think beyond that milestone, to what independence will mean for a new and fragile country in the south and a significantly changed country in the north, including for Darfur.

The United States helped to bring about the Comprehensive Peace Agreement. We have led the world in providing humanitarian assistance and in supporting the peacekeeping mission in Darfur. While the Sudanese must own their future, the United States can help the parties find a path forward to peace and stability.

EPA OVERSIGHT

Mr. INHOFE. Mr. President, I would like to take a few minutes today to speak about the importance of oversight.

As you may recall, on April 22, 2010, EPA's new lead-based paint, the lead, renovation, repair and painting rule, went into effect. At that time, offices on the Hill were inundated with intense public outcry from constituents—from homeowners to contractors to landlords to plumbers—all trying to get more information about a rule that, in most cases, they had just learned about. People were confused about the implications of the rule.

This rule affects anyone who owns or lives in a home built before 1978 and

looking to do a renovation. Specifically, the rule requires that renovations in these homes that disturb more than six square feet must be supervised by a certified renovator and conducted by a certified renovation firm. In order to become certified, contractors must submit an application—with a fee—to EPA, and complete a training course for instruction on lead-safe work practices. Those who violate the rule could face a fine of \$37,500 a day.

In my role as ranking member of the Environment and Public Works Committee, prior to implementation, I sent several letters to EPA expressing concern with the rate of training. I wrote on two separate occasions warning EPA that it seemed badly unprepared to properly implement the rule. In both cases, EPA said they were ready.

In a June 3, 2009 letter responding to my concerns, EPA wrote:

I agree that both EPA and the regulated community have a great deal of preparation in front of us as we approach next April's deadline. I am confident, however, that the ten months between now and April 2010 will allow us to meet this deadline....We are confident that all renovators subject to the requirements of the rule will be able to find a provider in advance of our deadline.

In a letter dated December 1, 2009, EPA wrote:

we are confident there will be enough training providers to meet the demand. EPA does not plan to revise the April 2010 effective date of the RRP rule....Currently, the capacity for training is in excess of the demand as several training courses have been cancelled for lack of attendance.

On implementation day, April 22, 2010, EPA had only accredited 204 training providers who had conducted just over 6,900 courses, training an estimated 160,000 people in the construction and remodeling industries to use lead-safe work practices. That number fell far short of the total number of remodelers who would be working on pre-1978 homes.

Let me say it again: on implementation day, EPA had only trained an estimated 160,000 people in the construction and remodeling industries to use lead-safe work practices.

I suspected that there wouldn't be enough contractors to even meet EPA's estimate of certifying 186,811 renovators by April 2010. So I sent a bipartisan letter to OMB requesting that they delay implementation of the rule until there was enough time for more people to be certified. Additionally, I spoke to Cass Sunstein, Administrator of the Office of Information and Regulatory Affairs at OMB, and was joined by some of my Oklahoma contractors, who relayed the difficulties they were facing. I appreciate Mr. Sunstein listening to the concerns of my Oklahoma constituents. He told us he recognized the economic impact of the implementation of the rule and explored ways to provide a 60-day delay, but, by April 23, we simply ran out of options.

The rule was in place, there were not enough renovators, and EPA argued that a delay in the rule would delay