



KPA M-1992/I AT-4 ATGM on parade in P'yongyang. Note the AGS-17 grenade launcher on the roof above the driver. (KCNA)

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KPA Mechanized Infantry Battalion¹

The Korean People's Army (KPA) fields approximately 3,900 tanks and 2,100 armored personnel carriers (APC). While these later vehicles can be found throughout the KPA they are concentrated in the mechanized infantry battalions organic to mechanized infantry and tank brigades and subordinate to the General Staff Department's Tank Command. The KPA's mechanized and tank divisions and brigades represent its strategic mobile reserve, mobile counter-invasion force, and the exploitation force for its "one-blow-nonstop-attack" against the ROK.

Background

The KPA received its first APCs during the mid-to-late

1950s when small numbers of the BTR-40 and BTR-152 were provided by the Soviet Union.² The BTR-152s are reported to have been in inventory from 1955, while the BTR-40 from 1958.

It wasn't until the late 1960s when additional APCs entered KPA service with the arrival of the Soviet BTR-50P and BTR-60PA/PB and the Chinese Type 63A (a.k.a., A-531). The KPA would eventually acquire 240-280 BTR-60PA/PBs, 50-100 BTR-152/-40/-50P and 160-180 Chinese Type 63As. these later vehicles are known as the M-1967 by the Republic of Korea (ROK) and U.S.

During the late 1960s-early 1970s the DPRK commenced domestic research, development and production of numerous tanks, self-propelled guns and APCs including the Chinese Type 63B/C/D (B-531 and YW-531C/D). Production of these later vehicles would eventually include numerous variants for mortar, artillery, antitank, antiaircraft, command, and engineer vehicles and would in due course become the KPA's standard APC. This family of vehicles is generally known as the M-1973/VTT-323 by the ROK and U.S. These efforts and the acquisition of other vehicles allowed the KPA to initiate the first phase of a comprehensive force expansion and mechanization pro-



KPA VTT-323 APC on parade. Note the SA-16 SAMs mounted behind turret. (KCNA)

gram during the early 1970s.

As best as can presently be determined the early APCs were not concentrated into mechanized infantry battalions, but rather dispersed among the headquarters and reconnaissance elements of infantry divisions deployed along the DMZ. Subsequently, mechanized infantry battalions are believed to have been established subordinate to the General Staff Department's Tank Command and within the 105th Tank Division. As more APCs became available during the mid-late 1970s mechanized infantry battalions were established within the independent tank regiments.

During the early 1980s the increased production of tanks, self-propelled artillery and armored vehicles allowed the KPA to execute the second phase of its force expansion and mechanization. This first witnessed the formation of seven mechanized divisions and then four mechanized corps, a tank corps and an artillery corps during the mid 1980s. Concerning the mechanized divisions, these were formed by reorganizing motorized infantry divisions within the III Corps (West coast around P'yongyang and Nampo), VII Corps (East coast around Wonsan and Hamhung) and



KPA VTT-323 APCs on parade. (KCNA)

the four forward corps (I, II, IV and V). Some of these "new" mechanized units initially possessed a high number of motorized units equipped with trucks rather than APC equipped mechanized units. This ratio would, during the late 1980s and 1990s, gradually shift in favor of mechanized units as more APCs and other self-propelled systems became available.

The second phase of the KPA's force expansion and mechanization program would continue into the early 1990s (e.g., a second artillery corps was established during 1990-1991). These modernization efforts would slow dramatically during the early 1990s as the DPRK entered a long period of economic collapse. Research, development and production of numerous tanks, self-propelled guns and APCs, however, did continue. Albeit, at a slower pace and a number of new platforms based upon the M-1967/VTT-323 entered service in limited numbers within tank and mechanized units.



KPA VTT-323 M-1992 SP ATGM. (KPA)

During the early 1990s the KPA initiated a shift towards improving its asymmetric warfare capabilities. This was precipitated by extensive study of, and lessons learned from, Operation DESERT STORM. The validity and importance of these organizational changes was reinforced by additional lessons learned from Operation IRAQI FREEDOM. As a result during the early 2000s one artillery corps was reformed into a division and surplus assets distributed to the forward corps. This was followed by the reorganization of seven infantry divisions into light infantry divisions and the expansion of special operations forces within the forward corps deployed along the DMZ. By 2006 the two mechanized corps were reorganized into two mechanized

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infantry divisions (bringing the total to four), the tank corps was reorganized as a tank division, and the remaining artillery corps was reorganized as an artillery division.

Organization

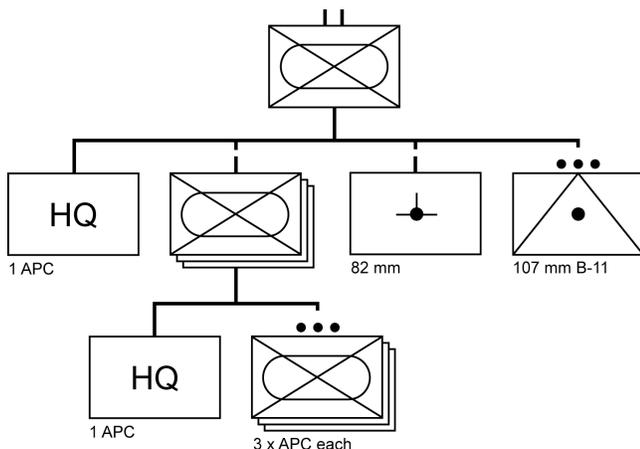
Within the KPA the mechanized infantry battalions are organic to both mechanized infantry brigades and tank brigades. Additionally, a small number can be found subordinate to the General Staff Department's Tank Command.

The tables of organization and establishment (TOE) for the mechanized infantry battalion have always been based upon that of the standard infantry battalion—a headquarters, three infantry companies, a mortar battery and anti-tank platoon. Over time as larger quantities of more modern equipment became available the mechanized infantry TOE appears to have undergone at least two, and possibly three, major revisions. Generally, these organization developments can be arranged chronologically as 1960s-1970s, 1980s-1990s and 2000 to present. Despite this seemingly orderly chronological partitioning it appears that some KPA mechanized infantry units may retain older TOEs.

Regardless of TOE, there are often distinct differences between units of the same type deployed within the forward corps deployed along the DMZ and those within the rear area corps.

The TOE for the mechanized infantry battalion during 1960s-1970s consisted of approximately 460 officers and enlisted personnel and was organized into a headquarters and rear services element, three mechanized infantry companies, mortar battery and a antitank platoon. It was equipped with 31 BTR-60, M-1967 or M-1973 APCs and approximately 19 trucks.

The battalion headquarters and rear services element consisted of four components: staff, political, political secu-



APCs are either Type 63A (A-531/M-1967), YW 531 (VTT-323/M-1973) or BTR-60

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Mechanized Infantry Battalion 1960s-1970s

urity, and rear services.³ It was equipped with 1 APC and 6 trucks.

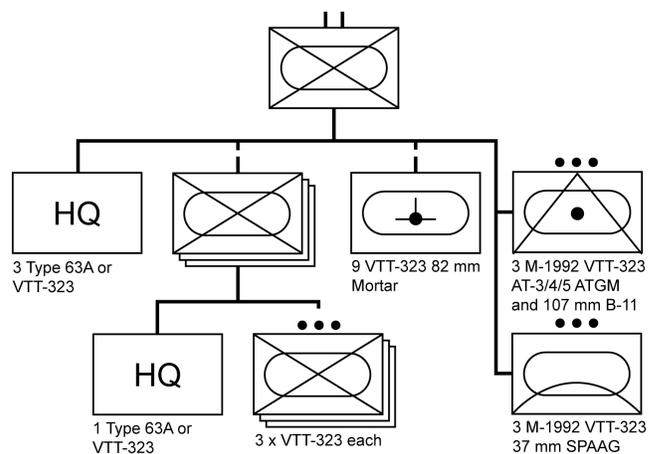
The three mechanized infantry companies were identical and each consisted of approximately 106 officers and enlisted personnel and was organized into a headquarters and three mechanized infantry platoons. Each company had 10 APCs (one for the company commander and three in each platoon).

The mortar battery consisted of approximately 57 officers and enlisted personnel and was organized into a headquarters and three 82 mm mortar platoons. It was equipped with 9 mortars and 9 trucks.⁴

The antitank platoon consisted of approximately 24 officers and enlisted personnel and was equipped with four 107 mm B-11 recoilless rifles and four trucks.⁵

During the 1980s-1990s the DPRK engaged in the research, development and production of a wide range of tanks and armored vehicles. Concerning the mechanized infantry battalion the most significant development was the production of numerous VTT-323 based support vehicles. This period also witnessed the acquisition of the Soviet/Russian BMP-1 (and possibly BMP-2) armored fighting vehicle in what is believed to have been small numbers. These efforts allowed for a general motorization and mechanization of the KPA and resulted in modification of the mechanized infantry battalion TOE.

The 1980s-1990s mechanized infantry battalion built upon the previous TOE but expanded it by the addition of a self-propelled air defense platoon, the adoption of antitank guided missiles (ATGMs) and surface-to-air missiles (SAMs) and the mechanization of the mortar and antitank platoons. The battalion now consisted of approximately



APCs are primarily YW 531 (VTT-323/M-1973) although some Type 63A (A-531/M-1967) are found in headquarters. Some battalions are equipped with BTR-60s in the headquarters and mechanized infantry companies.

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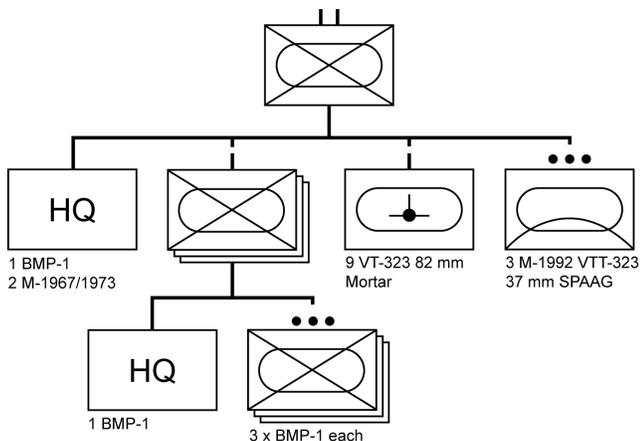
Mechanized Infantry Battalion 1980s-1990s

525-550 officers and enlisted personnel and was organized into a headquarters and rear services element, three mechanized infantry companies, self-propelled mortar battery (82 mm), self-propelled antitank platoon (AT-3/4/5 ATGMs) and a self-propelled air defense platoon. It is equipped with approximately 46-54 APCs and 14-15 trucks. These APCs are distributed as follows,

HQ	1-3 M-1967/VTT-323 APCs
Mech. Infantry Co. (3)	10 VTT-323 APCs each (some equipped with SA-7/16)
SP mortar battery	9-11 VTT-323 82 mm mortars
SP antitank platoon	3-5 M-1985 AT-3, M-1992 VTT-323 ATGM or M-1992 I AT-3/4/5
SP air defense platoon	3-5 M-1992 VTT-323 37 mm SPAAG

The details concerning the acquisition and deployment of the BMP-1 during this period are unknown. It would seem likely that these were formed into mechanized infantry battalions within tank units, however, this remains to be confirmed. It is probable that BMP-1 battalions would disperse with the self-propelled antitank platoon. Therefore such battalions would consist of approximately 500-525 officers and enlisted personnel and was organized into a headquarters and rear services element, three mechanized infantry companies, self-propelled mortar battery (82 mm) and a self-propelled air defense platoon. It is equipped with approximately 44-49 armored fighting vehicles and 12-13 trucks. These are distributed as follows,

HQ	1 BMP-1
	1-2 M-1967/VTT-323 APCs
Mech. Infantry Co. (3)	10 BMP-1 each



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Mechanized Infantry Battalion (BMP) 1980s-1990s

SP mortar battery	9-11 VTT-323 82 mm mortars
SP air defense platoon	3-5 M-1992 VTT-323 37 mm SPAAG

Currently, while the mechanized infantry battalion has been standardized on the VTT-323 and its variants, there are also a small number of BTR-60 and BMP equipped units. Likewise, a significant number of M-1967s remain in service. Although these later vehicles appear to have been moved into headquarters and support elements.

While the majority of the KPA's mechanized infantry battalions are believed to follow this TOE preliminary information suggests that since 2000 further changes have occurred within some mechanized infantry battalions. Among these changes may be: the replacing Type 63/M-1967 vehicles with VTT-323 base vehicles, the addition of greater numbers SAMs and air defense vehicles, and the replacing of the 82 mm mortars with a battery of M-1992 120 mm SP system or the VTT-323/107 mm MRL.

BTR-60 in KPA Service

Although not often seen, the BTR-60 armored personnel





carrier has been in KPA service for almost 40 years. The first BTR-60s were received from the Soviet Union during the late 1960s. While the majority of the BTR-60s received are reported to have been the BTR-60 PA/PB models, there may have also been a small number of the BTR-60 R-145BM (the command version, sometimes identified as the PU).

It is likely that the first BTR-60s were utilized to equip a number of mechanized infantry battalions subordinate to the General Staff Department's Tank Command and within the 105th Tank Division. Battalions were subsequently established within several motorized and, newly established, mechanized brigades.

Additional BTR-60 were apparently received during the early 1970s and by the late 1970s the total inventory was an estimated 240-280 vehicles. Given the TOE information

currently available this would suggest that the KPA could have established approximately 7-8 BTR-60 equipped mechanized infantry battalions or two mechanized infantry regiments.

The images provided here, while of poor quality, depict BTR-60PBs during various KPA parades during the late-1990s-early 2000s.

Addendum: Han-gang Bridges, 1950

The subject of the KPA's 1st Engineer Regiment's bridging operations on the Han-gang (i.e., Han River) in Seoul during July-September 1950 remains popular among readers and has been discussed in three issues of *KPA Journal* (Vol. 1, Nos. 2, 3 and 5). A KPA propaganda photograph is presented here which purports to show the 1st Engineer Regiment's pontoons on the Han-gang being defended by a camouflaged 85 mm anti-aircraft artillery battery of the 11th Anti-aircraft Artillery Regiment.⁶ It should be noted that the terrain in the photograph does not appear to represent the Seoul area. It is possible that the image was taken at a different time and location.

Addendum: P'okpoong Main Battle Tank

The article and addendum concerning the KPA's P'okpoong main battle tank that appeared in Vol. 1, No. 4 and No. 6 continue to draw much attention. In response to a number of reader inquiries I am providing a few more comments here.



KPA propaganda photograph purported to show the 1st Engineer Regiment's N2P heavy pontoon bridge across the Han-gang. The background shows a raft made from N2P pontoons, while there is a NLP pontoon in the foreground.

Question: You mentioned that the photos may be part of a disinformation campaign. Do you think that this the case, or have any opinion on the matter?

Comment: We know that the DPRK engages in numerous and often extensive disinformation efforts to deceive the ROK and U.S. They are certainly aware that all images and video that they produce are closely scrutinized by the ROK and U.S. Currently available open source information cannot determine whether the imagery of the P'okpoong is part of a deception operation.

With that said a variety of sources tell us that the KPA has been working on such a vehicle for some time and had a one time attempted to establish a production line for the T-72—this effort failed. The vehicles illustrated in the available imagery fit what we know of that development effort and is within the technical capabilities of the DPRK's arms industry.

Question: Looking at the photographs, I was also wondering weather [sic] there was the possibility that this is an extremely heavily modified [Ch'onma] as opposed to a new design?

Answer: A fair question. It is conceivable that the original mockup or even initial prototypes were based upon a T-62/Ch'onma vehicle, however, I believe that the underlying basis for this vehicle was the T-72. Although not necessarily visible in the imagery presented in the article the engine deck is strikingly similar to that of the T-72.

Editor's Note

I hope that everyone is enjoying their Summer, or Winter as the case may be. I have been externally busy and thus the delay in publishing this issue. I hope to have the August issue out shortly and by the end of September to be back on schedule. Possible articles for the next issue include: the Korean Worker's Party Room 99; photos detailing the wet well on DPRK infiltration vessels ("Mother Ships"); KPA wartime river crossing equipment or underwater crossings; the 124th and 283rd Army Unit's 1968 raids near Samch'ok - Ulchin; the K-61/PTS in KPA service; ballistic missile organizations; KPA Tank Battalions, and the DPRK's arms production infrastructure ("second Economy"). What makes it into the issue is dependent on my available time and reader interest—so please let me know.

For those in the Virginia area on September 1st I will be speaking, along with some other very interesting people, at the Marine Corps University conference *Confronting Security Challenges on the Korean Peninsula*. The conference is sponsored by the Marine Corps University and Korea Economic Institute. Information can be found at: <http://www.mcu.usmc.mil/Pages/Events,%20Conference.aspx>

The *KPA Journal* website is almost ready to go live. I will keep readers informed when its up.

Readers are encouraged to freely share *KPA Journal* with their colleagues and friends. If they'd like to keep receiving the journal please encourage them to email me so that I can add them to the mailing list.

As always all readers are encouraged to submit any corrections, clarifications, comments or simply share ideas of what you would like to see in future issue of *KPA Journal*. Thank you all for your encouragement and support.

—Joseph S. Bermudez Jr.

Endnotes

- ¹ Interview data collected by Joseph S. Bermudez Jr.; Ministry of National Defense, Republic of Korea, *Defense White Paper*, Seoul, 1991–2009; Defense Intelligence Agency, "North Korean Armed Forces Modernization," *Defense Intelligence Digest*, December 1968, pp. 14-17; Defense Intelligence Agency, *North Korea Handbook*, PC-2600-6421-94, Washington, D.C., 1994; U.S. Army. FC 100-2-99, *North Korean People's Army Operations*, Fort Leavenworth: Combined Arms Center Development Activity, December 1986; U.S. Army. FM 34-71, *Opposing Force: North Korea*, Fort Huachuca: U.S. Army Intelligence Center and School, February 1982; U.S. Army. *North Korea People's Army Handbook*, Fort Leavenworth: Battle Command Training Program, April 1992; U.S. Army. TC 30-37, *Opposing Force: North Korea*, Fort Huachuca: U.S. Army Intelligence Center and School, January 1979; US. Marine Corps. *North Korea Country Handbook*, MCIA-2630-NK-016-97, Quantico: Marine Corps Intelligence Activity, May 1997; and Hodge, Homer T. "North Korea's Military Strategy," *Parameters*, Spring 2003, p. 68.
- ² The KPA did utilize the Soviet BA-64 armored car in small numbers during the Fatherland Liberation War within its tank and mechanized units. There is the possibility that these vehicles continued to served in very small numbers in the years immediately following the war until replaced by the BTR-40 and BTR-152.
- ³ The rear services element consists of supply, rations, transportation and medical sections. The staff element includes a staff and a communications platoon.
- ⁴ While some sources state that the mortar battery is equipped with ten 82 mm mortars this appears to be incorrect as the standard battery has nine.
- ⁵ While the antitank platoon may have initially been equipped with the 82 mm B-10 recoilless rifle, it appears that this was upgraded to the 107 mm B-11.
- ⁶ According to Soviet sources the 11th Antiaircraft Regiment was equipped with 24 x 37mm M-1939 light AA guns, 12 x 85mm M-1939 medium AA guns, and 30 x 12.7 mm and 14.5 mm heavy antiaircraft machine guns. N. L. Volkovskiy (Ed.), *The War in Korea 1950-1953*, Saint Petersburg, OOO Izdatel'stvo Poligon, 2000, [translation by Stephen Sewell], pp. 29-55.