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W A R N I N G

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The following is a translation from the German military periodical SOLDAT UND TECHNIK, Vol. 38, No. 1/(January) 1995, p. 4.

LETTERS TO THE EDITOR

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Dear SOLDAT UND TECHNIK:
A friend of mine told me about the revolutionary design of a Chinese battletank which he allegedly saw in a Chinese technical magazine. In the light of the rather conventional development of Chinese defense materials to date it seems rather unlikely to me that such a tank exists. Or are the Chinese, as in other civilian areas of industry, now also on a "long march" to new shores of tank development?

Sincerely yours,
Walter Hermann, Munich

Indeed, it may be possible that in China too futuristic tank development concepts have been thought through. Whether or not the future Chinese battletank you refer to is similar to the battletank shown in the May 1994 issue of the Chinese technical magazine "Ordnance Knowledge" seems more than questionable. The illustration shown in the magazine, however, does show that aspects of futuristic tank development trends are also being examined in the Orient, with these trends being specifically:

- the transition to a two-man tank crew design concept;
- the housing of the tank crew within a compact crew compartment within the forward section of the vehicle chassis;
- the providing of an externally mounted main weapon upon the vehicle chassis roof with a large caliber tankgun, and separate-loading ammunition in the rear of the tank hull;

and

- the providing of special-purpose protective armor to protect the crew compartment with the protective armor having a continuous extension running approximately 1,000 mm longitudinally along the frontal area.

Interestingly enough, the drawing well illustrates the basic problem posed by such future-oriented approaches--specifically the fact that despite considerable reduction in the unarmored areas of the crew and engine compartments, there will still be *no* reduction in the primary dimensions of the vehicle due to the considerably greater room which will be required for the main tankgun, ammunition, and the special-purpose armor, with similar increases likely in terms of vehicle combat weight as well!

The concept of the automatic loader evidently calls for it being possible to load ten rounds and associated propellant charges onboard the tank in every azimuthal position of the gun mount as readily available ammunition. In addition, another 25 rounds and propellant charges are shown as being housed in the hull. Ammunition stowage still needs improvement. Because of the simple, but rather space-consuming loading process involved, the volumetric size and design height of the gun mount is unusually large. At a design height of 2.60 meters, the design height is a good 200 mm greater than that of the M1 battletank.

Despite the low silhouette it is obvious that due to the required degree of automation required with respect to command and control equipment, sensors, weapon slaving mechanisms, and main tankgun loading and unloading mechanisms alone, the design concept in many respects will require novel and demanding technologies which the Chinese armament industry will almost certainly not be able to bring to operational readiness over the next fifteen years without foreign assistance. Furthermore, the design concept shown in the illustration, when compared to currently known Chinese vehicles, would require an almost unimaginable increase in procurement and operational costs which stand the entire Chinese armed forces infrastructure and arms design philosophy on its head! What is more, in terms of exporting, the new tanks would not be able to be sold in the numbers the Chinese arms industry has gotten used to. And finally, in the light of the huge population of China there will be no impetus to reduce the size of tank crews, resulting in the continued development of Chinese combat vehicles in the usual evolutionary manner.