



## OLVANAN PEOPLE'S NAVY MARINE CORPS SOUTHERN MILITARY FLEET



### First Marine Division enhancements program

1. Following the OCP Chairman's wise guidance, a study was conducted see what lessons might be learned from the Russian special military operation in Ukraine. Olvana was in the blessed position of being able to gather data from both sides, and a report with recommendations was submitted for *OPA High Command* review and *Party* consideration.
2. The *First Marine Division* was given the great privilege of implementing a set of enhancements as described here in this document. In general, we can say, these enhancements correspond to recommendations from the initial report where there were not major initiatives underway already. For example, this program does not involve significant electronic warfare capability as rapid development in that area is already the responsibility of a senior army team and several formations who are conducting trials.
3. For convenience of the honoured reader, this document introduces the implementation of the special enhancements programme systematically, making first a description of the changes or additions to the subunits of the division as a whole, and then proceeding to convey the changes within each of the combat brigades.
4. Before describing these enhancements, it is appropriate to communicate one of the most successful initiatives which concerns *Uncrewed Air System (UAS)*. This initiative is not however in the true meaning an enhancement, as it does not involve formal introduction into service of different equipment. The initial Ukraine report recommended that a trial be conducted in several Brigades of identifying and developing a *Uncrewed Air System (UAS)* operator in every *Marine Section*. This was envisaged as being ambitious. However, when the call for volunteers was given out, leaders were overwhelmed with volunteer Marines wishing to play their part and many bringing in own-purchased drones to demonstrate their skill and loyalty. At this time, Divisional staff reached out to drone manufacturers explaining the intention to conduct trials (and, admittedly, mentioning the Chairman's interest) which prompted great enthusiasm towards participation, with several companies quickly offering equipment free of charge. The method of taking full advantage of this commendable patriotic fervour has been to pair each *Marine Brigade* with a manufacturer, while the political officers of the Division have been directing the conduct of UAS racing competitions. There is much good work occurring in exploration of how UAS can help the low-level marine battle, and it should be noted that the relevant technical departments have been consulted to include appropriate counterintelligence provisions given the electronic signature of all of these activities.
5. The changes within the division are as follows;

#### **Divisional logistics.**

6. There was concern that arose from our analysis of Ukrainian lessons when applied to our own logistics arrangements. One can certainly emphasise that we are well ahead of the Ukrainians and

Russians in terms of mechanical handling, and the '*Intelligent Logistics*' program for proper management of the movement and holding of stocks is being rapidly integrated across the Division. Yet improvements are needed in transport on difficult terrain and protecting ammunition stocks.

7. In the first case, certain significant comrades were concerned that while we have a very mobile tracked vehicle fighting force, our reliance on wheeled logistics represents a weak link. As you know there are several projects for a new tracked tactical amphibious logistic vehicle, but in order to be able to assure flow of stocks across difficult littoral terrain we are raising an *All-Terrain Transport Company* within the *Material Support Battalion* based on the Python system with six lead units and 12 following units. Importantly, to ensure this capability can be deployed and redeployed rapidly the Company has its own fleet of 18 armoured vehicle transporters.

8. In the second case, especially because of the threat demonstrated in the Ukraine by both lethal armed munitions and civilian enemies passing target information, there is an urgent need to better distribute, disperse, conceal and guard ammunition stocks. This will be achieved through the addition of an *Ammunition Dispersal Company* to the *Material Support Battalion* of the Division. This is an unusually large company of six platoons (corresponding to the six brigades) and might perhaps be regarded as an interim arrangement (a Battalion structure is a possible future arrangement). This organisation allows the deployment of 18 ammunition distribution points, each of which will have the IT systems to function as a node within the *Intelligent Logistics* system. While there is considerable extra lift in this structure in the form of 36 SX2190 trucks with cranes, the crucial difference is the provision of both a backhoe excavator and a forklift to routinely enable a mechanical dispersal of ammunition pallets in below ground scrapes. The provision of a security section within each ammunition point is not only assigned to secure the now more dispersed ammunition, but equally important, is able to ensure that all stocks are suitably camouflaged.

### **Divisional deception arrangements**

9. Comrades who have been in contact with Russian sources have shared how the traditional Slavic concept of Maskirovka has again achieved prominence as the conflict has continued. However, one should be critical of the Russian, (and possibly Ukrainian) practice of some commanders independently constructing dummy positions at a low tactical level, as this appears to increase the signature in the area of defences. We have therefore, and as proposed earlier, determined to develop an initial new capability at divisional level and are doing so with a *Deception Engineering Company* within the *Information Warfare Battalion*. This has resulted in a novel approach where a subunit of engineers are integrated into an otherwise fairly technical organisation. Again, there is a six-platoon structure in order to provide deception support for each brigade if necessary. It has the capability to deploy a wide variety of deceptive arrays. The 'inflatable dummy systems' have captured a certain amount of media attention; however the capabilities are rather more sophisticated. In particular, they are equipped to make innovative use of treated plastic panels which have useful electromagnetic reflection and heat radiation properties to construct 'illusions'. This will typically be used in conjunction with camouflage nets and ambiguous excavations – which is why the *Deception Platoons* have their own backhoe digger. They also have an EW vehicle and portable modular transmitters and signal generators.

## **Divisional chemical smoke**

10. The value of obscurants in countering (strictly speaking mitigating) the lethal drone threat is evident. While conventional visual range smoke may become less effective as some munitions switch to thermal band sensors, projected obscurant systems are likely to remain valuable because of the effectiveness of multispectral powders. Our Division is much honoured by being the first to field the new *Sky-smoke* capability. This will remain a divisional asset, reflecting its current scarcity, the need to develop procedures centrally and the need for concentration of fire units to achieve significant sustained effect. As described below, we have made other arrangements at Brigade level (pending development of amphibious armoured tracked launcher versions).

11. The T23 Sky-smoke systems are employed in platoons of three launcher vehicles, directed from a light armoured command vehicle and supported by three resupply trucks. Smoke mission planning and control is normally organised at company level, directed from a command vehicle which deploys its own passive sensors and a YLC 15 radar (currently on a commercial vehicle for trials purposes). Each of the three Sky-smoke Companies would normally be assigned to a main-effort marine brigade. The *Surface Smoke Company* with nine TDA 2K generator vehicles can be deployed as a single entity or as platoons of three vehicles. Under ideal conditions a single vehicle can effectively blanket an area of several square kilometres.

## **Light security Battalion**

12. One may undoubtedly recall our dear chairman's puzzlement at the incapacity and vulnerability of Russian armoured columns driving towards Kiev early in the Russia-Ukraine conflict. While there is no possibility that Olvanan formations are afflicted by corrupt hollowness, there are still reasons to be concerned about some vulnerability of mechanised formations in close country. One of our Brigades conducted some two-sided replay trial exercises, and they discovered that when conducting mock battles in and amongst buildings enemy players were able to infiltrate and attack paused vehicles – even using hand placed charges. To counter this tactic, it proved necessary to follow doctrine and leave two soldiers to protect each of our valuable fighting vehicles. However, the downside is that this reduced the dismounted fighting force from each vehicle to a team of five or even four. In practice this could mean that for conducting clearing operations in a close country battle there is a wasteful lack of balance between the shortage of dismounts and the excellent capabilities of the vehicles. Other comrades have also expressed concerns of the suitability of ordinary formations to maintain security of seized populated areas with appropriate political awareness.

13. Consequent to these concerns, we have raised a *Light Security Battalion* mounted only in trucks or light civilian 4x4 vehicles (apart from a small number of Lynx 8 x 8 vehicles for logistic and communication purposes). The companies are organised along conventional lines, with three platoons each of three sections of ten. They are also conventionally armed except for an emphasis on precision weapons (rather than high volume of fire) such as the anti-material rifle and the precision 35mm grenade launcher given their limited capacity to carry ammunition. The key role for this unit is to be deployed forwards in a dismounted role by individual companies to support formations conducting close terrain operations. This would typically occur after leading mechanised units have conducted a seizure and would be brought forward during the doctrinal reorganisation and regrouping pause. The light marine company would either be employed to secure the gains of an *urban seizure* or form integrated urban *Grupa* for systematic offensive operations. Crucially, each *Light Marine Company*

has an embedded *People's Armed Police (PAP)* section. Once operations proceed to security or checking phases, a *PAP* officer is assigned to each *Marine Section*.

### **Brigade artillery enhancement**

14. The need for artillery systems to redeploy immediately after engagement has been made abundantly clear in the Ukraine. This is an old lesson, however the wider dispersal of both individual guns and fire units to reduce vulnerability to counter battery fire has been enabled by new navigation and computing systems. Furthermore, the introduction of precision munitions has also created a new opportunity for changed procedures where single gun engagement is a frequent tactic. In response to this we are enhancing the organisation of the *Light Artillery Battalions*. This is occurring at the same time as the change to the PLZ-07B amphibious 122 mm howitzer, and we are conducting the change progressively across the division with one *Artillery Company* of each battalion converted first.

15. The key change is that in each howitzer platoon (rather than in each company) there is now a ZBD-05 FDC allowing the platoon to plan execute its own fire missions, especially those of individual guns. Similarly, the platoon has three soldiers on motorcycles to bound ahead to conduct pre-survey, vehicle position marking and to lay line (allowing communication between guns and the FDC without the use of radio). All of this is integrated with the personal device artillery planning software that is coming into service. The other key changes are the addition to the *CSS Platoon* of a *Forward Ammunition Section* which has three PLZ 07B ammunition resupply vehicles as well as upgrading the trucks in the transport section to SX – 2306 with cranes. These are now able to ensure continuous mechanical handling of ammunition pallets from ammunition point to the guns.

### **Brigade Counter-UAS**

16. As reflected by the investment in *Sky-Smoke Systems*, the threat from Uncrewed Air Systems (UAS) is acute. There is urgent work being done in terms of electronic countermeasures and as you know amphibious version of our latest light anti-aircraft platform is being developed. However, it was very clear that some form of a minimum stopgap kinetic counter drone capability is required. The solution has been found by the ingenuity of one of the brigade commanders discovered that there are considerable contingency stocks of both the T63C APC with amphibious flotation front and rear and the T63 AAA with twin 25 mm cannon. The workshops have found that it is actually a fairly straightforward task to take one of each vehicle and produce an amphibious platform that can accompany the rest of the amphibious force of while it is afloat. It must be acknowledged that this is an obsolescent system, and even with four outboard motors, is far slower than either 04 or 05 series IFV. The platform is also somewhat top-heavy and it has been necessary to provide additional inflatable flight bags as a safety measure. Nevertheless, the innovative addition of an ingenious electro-optic fire control has given the division a unique self-protection capability in the short-term.

### **Brigade logistics**

17. The imperative to ensure the survivability of ammunition stocks highlighted in Ukraine requires us to make provisions within Brigades also. The arrangements are a mirror of what occurs at the divisional level, with the addition of a *Dispersal Platoon* to the *Material Support Companies*. This

provides a further SX2190 crane trucks for stock on wheels but as is done at divisional level, can mechanically disperse ammunition stocks in below ground camouflaged scrapes.

### **Brigade chemical smoke**

18. As a further response to mitigating the UAS threat, and building off the success of the initial experiment to use T63C as the basis of Triple-A capability, we have provided each brigade with a *Chemical Smoke Company*. The platform is again the T63C, but in this case mounted with 130mm MRL launchers taken from T63 platforms (initial trials included use of 107mm MRL). The company is organised into four *Chemical Smoke Amphibian Platoons*. Each has three of the adapted T63C MRL which also has an internally fitted smoke generator. There is fifth *Chemical Smoke Truck Platoon* which has three TDA2K smoke generator trucks.

### **Further discussion**

19. It is appropriate to mention certain recommendations that have not yet been implemented. It was proposed that 107 mm MRL should be brought out of reserve stocks and employed for obscuration purposes. In principle, this appears sound, however engagement with industry has revealed that in the short-term it will be better to concentrate on developing a range of 130mm rocket obscurants.

### **Conclusion**

20. The first Marine division has been most fortunate to have the opportunity to develop leading new capabilities for Olvana, as conveyed above. The unstinting support of the OPA High Command in prioritising this effort has been greatly appreciated and the trust involved will be honoured. The result is an unprecedented bettering of capability in those areas where it is beyond dispute that there are lessons to be learned from Ukraine. As a result, our ammunition resupply system is more responsive and less vulnerable and the risk presented by UAS has been significantly mitigated.