

Letter to the Editor

Dear Sir,

I have read through the previous issue of the Journal of Defence Studies (Vol. 8, No. 1, January-March 2014). It was a good read. The spectrum of topics varied from future needs to the state of relations with our neighbours, foreign policy, and the present holding of armed assets with a focus on the budgetary impact as well.

My specific comments relate to articles on the Indian Air Force (IAF) and also on Indian Armed Forces, namely 'Directed Energy Weapons for the Indian Armed Forces' by Bishwajit Bose and 'IAF Equipment and Force Structure Requirements to Meet External Threats, 2032' by Vivek Kapur.

In Bishwajit Bose's article on Directed Energy Weapons (DEW), Kinetic Energy Weapons (KEW) and the need of the IAF to go into the electronic pulse-based technology, he has tried to throw some light on the need of DEW. He also mentions that the US has been working on this technology for a decade. I would like to throw a light on this matter. We have been working on Zero Mass Weapon (ZMW) for some years now. The principle here is that we can send a triggered constant pulse of X energy through radio-magnetic waves, which can destroy a stationary, on ship as well an inter-spatial object. The use of IR, Laser, etc., is also made. Work on this technology started in Indian defence labs quite some time back. Moreover, there is a wide variety of usage of this technology, for example, sending commands to stationary huge servers of the enemy that are analysing and sending commands to our targets, which control the Indian defence radars and are used by the IAF and the Army. ZMW can affect mass devastation of the enemy loaded arsenal at far locations. The use of satellites will make the ZMW attacks more effective. I think we may have gone much further ahead into this field by now.

The article by Vivek Kapoor has given plenty of good calculations on our holding of IAF assets and the future need. India has small and large threats from all around the perimeter of our boundary. It requires terrain-based threat analysis as well as examination of the vulnerability

of the potential adversaries. We have to undertake threat mapping and place our arsenal in a mix and match matrix according to our capability, that is, aircrafts, missiles, ZMW and other weapon systems. In order to achieve this, the Defence Research and Development Organisation (DRDO), Indian Space Research Organisation (ISRO), IAF, Army, Navy, top technological institutes, the Department of Science & Technology, the IT and armaments industry, etc., must all work together. I further suggest that we must have higher level maintenance facilities with five operational commands for affecting quicker repairs of platforms and for improving equipment readiness state.

I take this opportunity to compliment the Editorial team of IDSA for bringing the Journal on a regular basis.

Best wishes!

Wg. Cdr. S.K. Dey (Retd.)