1. The 13th international conference on "Energising Indian Aerospace Industry: Mapping the Change" was conducted by the Centre for Air Power Studies, Society of Indian Defence Manufacturers and the Confederation of Indian Industry along with the IAF on September 05-06, 2018 at New Delhi. The conference, as in the earlier editions, brought together Government officials, serving Armed Forces officers, captains of industry (both Indian and foreign), MSMEs, academia and the users to discuss issues of concern of all stakeholders and arrive at action points for subsequent follow-up with all stakeholders. Industry associations such as the Society of Indian Defence Manufacturers / Confederation of Indian Industry would act as catalysts in resolution of these issues with both the user and the offices of the Government.

2. The broad objective of the conference was to conduct a status check on the “Make in India Process”, whether the inflexion point has been reached and whether the change has taken place at a desired pace. The feedback expected was in terms of policy review, resource allocation and regulatory support to accelerate this change.

3. The conference was inaugurated by the Vice Chief of the Air Staff, Air Marshal SB Deo PVSM AVSM VM VSM ADC, with a special address by Dr. S Guruprasad, OS/Sc 'H' & Director General - (PC & SI). The conference was spread over seven sessions and saw exclusive sessions by the Deputy Chief of the Air Staff, Air Marshal R Nambiar AVSM VM** and the Air Officer in Charge Maintenance, Air Marshal RKS Shera AVSM VSM, besides participation by the Technical Manager (Air), MoD, Air Vice Marshal Vishwas Gaur VM. In addition, the highlights of the conference were two special addresses: one by Shri Sanjay Jaju, Joint Secretary (DIP) Department of Defence Production, MoD and the other by Dr Pankaj Sharma, Joint Secretary (D & ISA), MEA. Ms Anandi Venkateswaran, US (D&ISA), MEA gave a presentation on the implications of India’s membership to the “Wassenar” export control
regime with a focus on opportunities accorded by the membership and the government policy initiatives pertaining to the Indian defence manufacturing sector. Governments of Tamil Nadu, Uttar Pradesh, Andhra Pradesh and Telangana also sent their representatives to highlight and make presentations on ‘promotion of the available investment opportunities in their respective states through the special defence corridors/zones’ created by them.

4. The discussions were free and frank and there was a general consensus that the change has generally been positive in the defence sector with a recognised need to further incentivise it along with dovetailing of indigenous civil aviation industry in the overall manufacturing landscape.

5. **Recommendations**

- Government needs to facilitate and promote the cause of Indian defence industry internationally using its diplomatic missions. Towards this, it is essential for the Indian defence industry database to be shared with foreign missions and consulates. Our Defence Attaches (DA) could play a vital role in supporting the endeavours of the Indian Industry in the Make in India framework. Suitable directives to the DAs could be accordingly communicated.
- The process for granting export NOCs needs to be further speeded up using online web-based interface which should be more responsive, interactive and with laid down time limits for the grant of clearances.
- The defence licensing procedure should be simplified and made free for manufactured items except for lethal equipment, which can be specified.
- An enhanced R&D and manufacturing base would require skilled and trained manpower in increasing numbers. Thus, an important component of the government’s thrust towards indigenisation must include the aspect of development of specific skill sets. This demands that the education system must be given a re-look to generate required skilled and non-skilled manpower. The prevailing system must adapt itself to inculcate the skill sets required by the R&D establishments and industry—this includes creativity, which is a must to spur innovation.
- There should be a concerted thrust to facilitate Indian Industry to mature to ‘Build-to-Specs’ under Make in India initiative. Towards this, the “Make” and “Strategic Partnership” models should be energised to shorten the time cycles.
Industry must focus on creative engineering skills and generating IPR. Indian entrepreneurs may be monetarily incentivised by the government in this important enterprise to prevent 'technology and brain drain'.

India is the ninth largest civil aviation market and on way to be the third largest in the coming decades. This has fuelled the need for a significant number of aircraft to be imported by the private operators. This huge market needs to be leveraged by the government to derive tangible benefits for increasing the manufacturing capabilities of the indigenous aerospace industry.

There was a strong sentiment amongst the participants that many globally certified and economical solutions to the problems and needs of the defence aerospace sector can be found by the existing expertise within the country. However, the members wanted greater transparency and timely access to the government-controlled lab facilities and field testing ranges (such as those available with DRDO, ADE et al). It could be sensed that the feeling was, "the rules permit this, but practically there are many a road block." The government may like to look into this, since private industry is not in a position to set up lab facilities and field testing ranges due to the exponentially high costs involved.

The MSMEs suffer huge financial losses on account of payment delays that are not in sync with delivery benchmarks. This is seen to be in sharp contrast with the payment arrangement for FOEMs who are paid through Letter of Credit. MoD should consider the option of Letter of Credit payment to Indian Companies.

The MoD may also consider initiating a process for online submission of Indian Contractor Bills. This will greatly reduce the payment cycle as lot of checks and controls could be done through software automation.

The MRO sector is one where focussed attention of the government is required. With such a large civil aviation fleet – which is set to expand exponentially in the coming years – it is indeed paradoxical that the majority of Indian operators send their aircraft to neighbouring countries like Sri Lanka and Singapore for getting their aircraft serviced.

The available technical expertise and allied infrastructure of Air India need to be converted into world class MRO facilities and put to better utilisation than at present.
To provide for a level playing field to the private industry against DPSUs as also to the overall Indian defence industry against FOEMs, MoD could consider making DGQA/CEMILAC as independent entities.