

# Patentmatics Monthly Bulletin August 2018.

## Main theme: Cost of Self Reliance?

1. A few years ago I had presented in the Economics Department of Central University in Hyderabad an invited presentation entitled “Self-Reliance & Political Freedom, the Two Sides of National Development”. Its Abstract is as given below:

*“History of our independence movement has revolved around three profound fountains of thought and action: political nationalism expressed for the first time by BG Tilak through his dictum “Freedom is my birthright...”, economic nationalism arising out of the well-known Drain Theory by the veteran Dada Bhai Naoroji again for the first time exposing the impoverishing effects of the alien Raj and technological nationalism propounded by the veteran industrialist JN Tata who professed that modern India should walk on three legs, namely, electricity, steel, and industrial science. Though among those veritable streams of thought the weakest and least orchestrated one was of course the last, it assumed wider acceptance and priority as a policy instrument with none other than Jawaharlal Nehru himself took up the cause and indefatigably started championing it after the attainment of independence. And one person who concretely elaborated its true content was Homi Bhabha who through his Growing Science” model said, “Imported technology would give a quick and assisted take-off.....but it shall develop the ability for independent flight only if it is propelled by engines of our own based on indigenous science and technology”. Thanks to such a lucid formulation of the doctrine of self-reliance and matching techno-political policy support at the highest levels of governance, India could achieve high levels of self-reliance in strategic areas like atomic energy, space and missiles technologies on the one hand and also the crucial agriculture sector through the celebrated Green Revolution on the other. There are, however, reasons to believe that under the post-ninety neo-liberal policy regime, vast changes are taking place to undo the past gains; this process coming into even sharper focus after the WTO/TRIPS conditionality conditions have come into force in the industry/technology sector. The questions raised*

*through the conference are undoubtedly valid and the attempts will be made to analyze them through a first level SWOT analysis of our own experiences in the field”.*

I was reminded of the same when I had read the following news on the glorious saga through which our ever first and indigenous fighter, Light Combat Aircraft, LCA. Interested readers may refer this fighter aircraft in the earlier columns of Patentmatics.

## **Indigenous fighter aircraft, Tejas, on the prowl**



SPECIAL CORRESPONDENT

THIRUVANANTHAPURAM, JULY 03, 2018 00:55 IST, The Hindu

The indigenous fighter aircraft Tejas of 45 Squadron ‘The Flying Daggers’ has commenced operations from its home base at Air Force Station at Sulur.

Air Marshal R. K. S. Bhadauria, PVSM AVSM VM, Air Officer Commanding-in-Chief, Southern Air Command and Asha Bhadauria attended the function conducted at the Air Force Station, Sulur.

The Southern Air Command based at [Thiruvananthapuram](#) was entrusted with the responsibility of integrating the fighter in IAF's concept of operations. The Command and Air Force Station, Sulur, have worked relentlessly to ensure the migration of the squadron to its home base in two years.

The 45 Squadron has been involved in the training of aircrew and technicians since its induction on July 1, 2016 and is now confident of undertaking its operations and maintenance of aircraft from the base directly under an operational command.

The 45 Squadron in its new base is commanded by Group Capt. S. Dhankhar VM and has handpicked aircrew, engineers, logisticians and ground personnel. Air Marshal R. K. S. Bhadauria has lauded the efforts put in by the operations,

**maintenance and administration branches of AF Station Sulur associated with induction of Tejas aircraft.**

### **Defence Ministry sets up committee to check HAL's 'high bill' for Tejas Mark1A**

Concerned about the price for an indigenous fighter jet, which the government has been keen to promote under Make in India scheme, the committee set up by the Defence Ministry will look into the pricing of military equipment

manufactured by defence PSUs.

Written by [Sushant Singh](#) | New Delhi | Updated: June 27, 2018 10:56:33 am



Once the committee submits its report, the ministry will form a commercial negotiations committee (CNC) to bring down HAL's price for the jet.

The euphoria within the defence establishment over the induction of the first indigenous Light Combat Aircraft into the IAF appears to have subsided with the Defence Ministry forming a committee to look into the "high price" demanded by Bengaluru-based public sector manufacturer, Hindustan Aeronautics Limited (HAL), for Tejas Mark1A.

Sources told *The Indian Express* that in response to a request for a proposal for 83 Tejas Mark1A fighter jets issued by the IAF in December last year, HAL quoted a price of Rs 463 crore per jet in April. This raised eyebrows in the government, sources said, as the price compared unfavourably even with more modern foreign fighters. "The HAL supplies the more modern Russian Sukhoi fighter, which it assembles at Nashik, at Rs 415 crore. The Russians supply it at Rs 330 crore. The Swedish Gripen was offered to us for Rs 455 crore, and F-16 for Rs 380 crore, and

both were to be made in India. The HAL itself gave us Tejas Mark1 at Rs 100 crore less. This price for an improved version seems high,” sources said.

**READ | [Rs 50,000 crore: Indian Air Force orders 83 Tejas aircraft from HAL](#)**

Concerned about the price for an indigenous fighter jet, which the government has been keen to promote under Make in India scheme, the committee set up by the Defence Ministry will look into the pricing of military equipment manufactured by defence PSUs. The committee is headed by Principal Advisor (Cost) in the ministry and is likely to submit its report in the next few weeks.



A priest offers prayers near the Tejas during a ceremony for its induction into the IAF. (PTI file photo)

Once the committee submits its report, the ministry will form a commercial negotiations committee (CNC) to bring down HAL's price for the jet. The contract for 83 jets, sources said, will take another year before it is finally signed.

According to sources, the Defence Ministry is also concerned about the delay in supply of the existing order of the first lot of 40 Tejas fighter jets. In last three years, only nine fighter jets in Initial Operational Clearance (IOC) mode were supplied against an order of 20. The order for another 20 Tejas jets in Final Operational Clearance (FOC) has not even begun, as the FOC has not yet been attained by the aircraft. The ministry has also agreed that the HAL will supply eight trainer aircraft out of 40, after the 36 Tejas Mark1 have been supplied. “The idea was that HAL will produce 18 Tejas fighters every year. That is the only way we can provide IAF to make up its numbers as its older fighters go out of service. But there has been a delay and we are in touch with HAL about it,” sources said.

The ministry had also asked IAF about allegations that it had made constant changes in ASQR (Air Staff Quality Requirements), which could have led to the delay. They found that there have been no changes in the ASQR of Tejas Mark1A, since it was first formalised in 2014. Even in the case of Tejas Mark1, the IAF had given 135 concessions on the ASQR to HAL.

“We were somewhat surprised to learn that contrary to the impression, there have been no changes in the requirements given by the IAF, except for items which had reached obsolescence. Mark1 had no Electronic Warfare capability and before Mark2 could be produced, Mark1A is meant to fill up that gap. Those were not additional requirements added later, but formulated in 2014 itself when HAL offered Mark1A,” sources explained.

The problem, sources said, are mainly of coordination and ownership of the Tejas project between the HAL, IAF and Aeronautical Development Authority (ADA). Borrowing from the successful Navy model of indigenous defence production, ministry is now asking for a senior member of IAF on the board of HAL for greater coordination.

The Tejas indigenous fighter project was first conceived in 1984, benchmarked against the Mirage2000, with a view to replace IAF’s ageing Mig21 fleet. The order for first 20 Tejas Mark1 (IOC) was placed in 2006, and the jet inducted in the IAF in 2016.

3. It is part of our S&T history that even the limited levels of Self Reliance was our national commitment under the first Prime Minister Jawaharlal Nehru and pursued to greater heights by Prime Minister Indira Gandhi essentially before the infamous Emergency regime and which in turn had enabled our country to become an “advanced developed country” by mid-1980s. Undoubtedly the above gains are being carried to also greater heights in those sectors under their continuing adaptation of the celebrated “Growing Science” model enunciated by the distinguished S&T doyen Homi Bhabha himself. As highlighted elsewhere in Patentmatics, the true laggard in this respect is the vast industrial sector bulk of them being unable to operate “autonomously” in the description of none other than the well-known economist and policy analyst Ashok Desai.

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