

# White Hope or Red Herring ?

## Prof Prodyut Das on 'Appropriate Technology Regional Transport Aircraft'



Unlike the design of military aircraft which is led by the “latest” (even if unproven) technology, the design of a successful civil aircraft is more hard headed; it is very closely defined by alternate surface transport speeds, availability, the density of population, distance between population nodules, condition of the economy, connectivity between the airport and the city centre and so on. These factors are quantifiable. The other factors, such as expectations in terms of punctuality, regularity, tolerance to noise, comfort and economy and their relative priorities go beyond statistics and slip into the realms of culture and philosophy. If the ‘East is East’ then its air transport options should also be ‘Eastern’!

However, the air transport scene has, for a century, been dominated by the Western paradigm. Asian countries have used

western equipment to solve part of their air transport needs, there being no ‘perfect’ equipment to provide an end-to-end transport solution and V/STOL aircraft, for instance, are infeasible to the point of being ‘exotic’. Western designs, whilst acceptable, are definitely sub optimal and in fact an imposition on Asian conditions.

The India of the 21<sup>st</sup> century is evolving, with changing economic conditions now opening up new opportunities. This is becoming a ‘new’ rather than a ‘competition’ area and the prospect of collaboration with the West does make commercial sense. New aircraft designs will be needed not only to meet the expected growth of what the Soviets called the *Selskoe Khozaistanni* (Rural Economy) but also to replace the present genre of Western-origin aircraft which would soon enough be phased out. The market is massive !

Such an emergent market can also be an opportunity for foreign entrepreneurs to invest in India. The cost of skilled labour is the single largest factor in development and production of aircraft. The technology of civil aircraft is considered “lower”, indeed the basic technology is almost a century old and well within the existing capability of India’s Industry, which however still lacks some ‘know why’ of certain aspects. In the mid-20<sup>th</sup> century, Europe had one or more aircraft manufacturer for every letter of the alphabet, from Avro to Zlin ! However, famous names slowly began to disappear as the cost of aircraft development became prohibitive for most medium and small scale enterprises of Europe. However the ‘seeds’ of that genius still exist. The ‘natural’ Indian enterprise and low labour costs plus exchange rates of the Rupee, together with Western aviation know how would spur