

AVI-OIL

passing through challenging times



How has been the year 2010 for AVI-OIL and what's your goal for 2011?

You must know first that this is going to be a very frank interview, and if any organisation or department feels offended – I would request them sincerely to review their decisions keeping the national perspective in mind, rather than succumb to the pressure from foreign aircraft or aeroengine suppliers.

As you are aware AVI-OIL has been established as a Joint Venture of Indian Oil Corporation, Balmer Lawrie & Co (both PSUs) and Nyco, France for the indigenous production and supply of aviation lubricants to the Defence Services and other aircraft operators with the sole objective of self-reliance for these strategic products. Time and again history has demonstrated that dependence on foreign suppliers in times of conflicts or political tensions can be disastrous. After all without lubricants, no aircraft can fly!

The year 2010 has been rather unfavourable for AVI-OIL. Our business has been hurt by certain procurement decisions for aerolubes, taken by the Defence Services.

AVI-OIL requires the support of IAF, and other services who are planning to induct other types of aircraft, and the Ministry of Defence, to ensure that the negotiations or the contracts with the foreign aircraft suppliers include a clause on the use of the indigenous lubricants, says the company's Chief Executive Officer J.R.Nanda in this interview to Aeromag Asia.

To give you an example our aeroengine oil which is fully approved by CEMILAC has been used on the An-32 transport aircraft for the last ten years with satisfactory performance. Suddenly, because the engines for this aircraft are being sent for overhaul to the foreign OEM, the operator under pressure from them has started to import the product, which has resulted in AVI-OIL losing over 100 MT/year of business. If this issue is examined with an unbiased mind for the technical parameters being projected as an excuse – it will show that our product provides the same, if not better, performance than the imported oil. OEMs threat of warranty considerations should be countered during negotiations, before awarding the contract for overhaul. The support to indigenous products should be a prime factor.

In another case, the tenders are being issued by one service, stipulating that only the imported product can be quoted for, although again our aero engine oil has been in use for the last ten years. This time there is no technical excuse or the involvement of the OEM. Perhaps the traders who deal in imports from that country have a better say in the matter! With this we have lost another 25MT of business.

On top of all these cases (there are many), the procurement agencies are not providing a level playing field for the indigenous aerolubes. To our understanding, any product to be used aboard a military aircraft operating in India must be approved by the centre for Military Airworthiness and Certification (CEMILAC), and its quality during supply must be checked by the Directorate General Aeronautical Quality Assurance (DGAQA), both organisations of the Ministry of Defence.

When you see a Tender document issued by a Defence Service stating that – for indigenous suppliers approval by CEMILAC and inspection by DGAQA is mandatory, but for the foreign supplier only the batch test certificate of that particular supply is sufficient – it shows the prejudice that still exists or can we conclude that the foreign products are automatically airworthy and no testing is necessary.

Such decisions have also led to a drop in our sales, and with such happenings I can only say that the year 2010 was not good for AVI-OIL, and we have taken many retrograde steps for self-Reliance. And the goal for 2011 – well, Inshallah things will improve! And perhaps we shall be able to retrieve the lost business and improve further.

How's the demand for aerolubes and tell us about this market?

The demand for aerolubes has been rather constant over the years. There have been limited inductions of military aircraft and at the same time a number of aircraft like MiG-23, MiG-25, Canberra and Iskra have been phased out. In the Civil sector though several airlines have emerged and a considerable number of aircraft have been added to their fleet, most of them are on lease which agreements stipulate the country for overhaul and maintenance checks who decide on the type of lubricant to be used. The absence of MRO facilities in India also leads to this situation. Even in the case of certain airlines like GO AIR and SPICEJET, where we have approvals, and have offered economic incentives, insurance coverage and foreign operators experience, there is a reluctance to accept our proposal. No airline in India wants to take the lead; as a result we are still waiting for a breakthrough in the civil



aviation business. No major change has occurred in the private sector except for the purchase of a few corporate aircraft and helicopters which do not have a large impact on the demand for aerolubes. The flying clubs and other training academies have also not enlarged their piston engine aircraft fleet – and to add to our woes the basic first stage trainer of the IAF has been grounded since one and a half years. So in essence the overall demand has been on the decline since 2008.

Could you talk about your focus on industrial lubricants.

The industrial lubricants market can be categorised in two sectors. One where the use of synthetic lubricants is mandatory, for example the aero derivatives gas turbines used for power generation or the lubricant for refrigeration compressors switching over to the eco-friendly R-134a gas as the refrigerant which became mandatory after the Montreal Protocol, to phase out the ozone depleting chlorofluorocarbons.

The other sector consists of the industry using conventional mineral petroleum based lubricants, which can be replaced by high performance synthetic oils to provide better performance, longer drain intervals, energy efficiency and easy disposability due to their biodegradability.

AVI-OIL commissioned its ester manufacturing unit in 2005 for the production of synthetic base stocks required for formulating aviation oils and with a view to diversify and has a capacity in this facility to produce esters for automotive synthetic and semi-synthetic engine oils as well as many types of industrial lubricants.

While we have managed to enter into the business for the gas turbine oils and the lubricant for refrigeration compressors which include those installed in the air-conditioned railway coaches, we are finding it difficult in other areas to

convince the user about the advantages that accrue with synthetic oils compared to the initial cost. This is happening even where the advantages are enormous like the non-flammable oils for power transformers and the equipment in the mining industry. The use of synthetic products in these areas can provide a much greater safety and reduction in fire incidents.

I think it will be a long time before the industry truly recognises the benefits for the changeover, which could perhaps be catalysed by large imports of equipment where the foreign OEMs make it mandatory to operate with synthetic products and of course on the type of lubricant approved by them.

Tell us about the full range of products being produced and marketed by AVI-OIL.

With the commissioning of the AVI-OIL blending plant in 1999, we established the capability to blend all types of lubricating oils required for the operation of the aircraft such as aeroengine oils, hydraulic fluids, protectives and specialities. These types can be tailor made to any Indian, Russian, French, British or US standard specifications, as the technical collaborators NYCO provide the know-how on a continuous basis, including under Joint development programmes for equipment specific to India.

The greases required for aircraft are currently being imported from NYCO and repacked at times after minor reprocessing, as the total demand volume is low.

It is our philosophy that we should be able to cater to the total lubricant requirements of any type of aircraft without the operator having to contact multiple sources. To that effect we are importing several low volume proprietary grades that are specific and mandatory for use in the equipment and at times

maintaining a stock of these in order to provide timely logistic support to the user.

Thus the complete range of aerolubes can be supplied by AVI-OIL. It must be emphasised that all the products supplied by us are certified by CEMILAC as being airworthy.

For the industrial lubricants we can supply synthetic ester based stocks for other oil companies to formulate their products or manufacture finished products such as gas turbine oils, refrigeration compressor oils, gear box oils, non-flammable hydraulic and transformer fluids and many more.

The overall product range is unlimited.

Could you talk about manufacturing capacity, ramp-up plans as well as your lab on quality assurance and new products?

The blending plant of AVI-OIL can manufacture 1400 MT per year of lubricating oils on a single shift basis. The plant is so designed that we can produce the grades ranging from 10 litres to 20 tonnes at a time, which helps in meeting the requirements of both large and low volume products. The ester plant has a capacity of 1250MT per annum and can produce any type of ester by appropriately selecting the type of acid and alcohol ingredients. The esters can be tailor made to provide the desired characteristics to the finished lubricant.

The manufacturing capacity is considered enough for the present demand for the aviation and industrial sectors. As and when the demand shows an increasing trend, we have provided for additional manufacturing capacity in terms of design parameters and space, so that this can be augmented within a short period.

Concerning our laboratory facilities, they are truly state-of-the-art and the Quality Management System is certified for



compliance with international standards ISO: 9001 and more appropriate the SAE Aerospace standard AS 9100 for the aviation sector. In addition to the regular quality control of the manufactured products, the laboratory provides technical service to the users by way of evaluating samples received from the defence units for product life extension or periodic condition monitoring of oil in aircraft service to predict incipient failures. This technical support is provided free of charge for the AVI-OIL product samples.

We have also established another laboratory which is now our Research and Development unit. This caters to the development of products not in the range of NYCO, or specific to Indian requirements and often with low volume demand. Considerable number of grades has already been developed. These are marketed under the AVI-OIL brand name such as Avilube, Avifluid, Aviprotec etc.

What are the other new initiatives of AVI-OIL, how has it grown over the years and where do you want it to go in the short-, medium- and long-term.

Today AVI-OIL faces a great challenge and any failure to meet timely the future objectives could make the company unviable. Our largest customer the Indian Air Force has plans to induct a large number of different types of aircraft in the next five years. As per the press reports the C-130J are arriving shortly, the Globe master C-17 deal is in the offing and the big MMRCA tender is under process – not to talk of the attack helicopters and the basic trainer aircraft. In this scenario the fleet of the IAF is going to drastically change in the next five years, resulting in totally different lubrication requirements and even for AVI-OIL's existing products to be validated and approved by the new OEMs.

Unless we obtain these approvals well in time, we will have no products to sell – a situation AVI-OIL cannot afford to be in.

It is at this critical stage that we require

the support of IAF, and other services who are planning to induct other types of aircraft, and the Ministry of Defence, to ensure that the negotiations or the contracts with the foreign aircraft suppliers include a clause on the use of the indigenous lubricants. If any new lubricant is required or any costs are involved in establishing the suitability of an existing product – the same could be covered under the 'Offset Policy'.

It is imperative that this support is provided, particularly during the negotiation stage, when the OEMs are obviously more receptive, rather than after the contract is signed. If this support is not forthcoming we will end up in a situation where the flying of a newly acquired aircraft is dependent on lubricants from a foreign source, and the costly hardware can be grounded for want of a few cans of oil. Doesn't this statement sound familiar to what happened in the 1965, 1971 conflicts and the later sanctions in 1998? Are we going to let history repeat itself?

Thus our efforts in the short and medium term will be directed towards the products required for the new aircraft fleet of the Defence Services, and in the long term we would like to establish ourselves as a prime supplier of ester basestocks and high performance industrial lubricants in addition to providing the total logistic support for the military.

Your thoughts on Aero India 2011 and expectations.

AVI-OIL has always participated in the Bangalore air shows starting with AVIA INDIA 1993. The transformation to Aero India Series and the increasing number of Indian and Foreign companies participating gives a platform for those connected with the aviation industry to learn about new aircraft and their requirements. The 'Aero India 2011' is expected to achieve even greater heights, in view of India's impending large acquisitions of aircraft and obviously

the foreign manufacturers will be vying to show their equipment and their performance capabilities.

We will utilise this opportunity to gain knowledge, meet the OEMs to open channels for communication, and learn about the design and performance capabilities of the aircraft on display. Even by observing their design features and the flight manoeuvres they can perform often helps us to select the correct chemistry for the lubricant design.

Could you explain AVI-OIL's role towards self reliance in the Indian Defence Industry?.

AVI-OIL's total commitment towards self-reliance is obvious from the fact that we have chosen this as the theme of our stall at 'Aero India 2011'. It is basically to remind all concerned that foreign dependence on such strategic products is not in the national interest. All the expensive hardware procured can be rendered useless, if the products are to be constantly sourced from abroad to maintain and operate the aircraft. How many times the term 'Self-reliance' has been emphasised starting from the country's struggle for independence, the industrial policy statement of 1948 followed by the resolution in 1956, to the more recent presidential speech at a conference in 2010 by the Marshal of the IAF Arjan Singh DFC that "you cannot fight wars with dependence on supplies from foreign sources", and is often repeated by the Ministry of Defence and also forms a part of the Defence Procurement manual.

AVI-OIL was established for 'self-reliance' and this is our motto – it is now up to the new aircraft acquirers particularly the Ministry of Defence to provide the necessary assistance so that we can continue to serve them in their interest of defending the nation.

I do hope that your readers have had the patience to read this interview and those concerned take the issue seriously.