

The factory at Kamra has a sizeable Chinese participation which can overhaul the Chinese F-6 aircraft and has successfully manufactured hundreds of 1140 litre drop tanks and thousands of line items of spare parts.



The factory is continuing to expand its facilities and take in its fold the rebuild and overhaul of FT-6, FT-5 and A-5 III Aircraft. The much talked about K-8 Jet Trainer is also manufactured or rather co-produced in Kamra.

The agency which has provided the knowhow about this aircraft is China National Aero-technology Import & Export Corporation. K-8 is in fact a typical US-China-Pakistan collaboration effort. In 1994 the Clinton Administration allowed the sale of Allied Signal Garrett gas turbines to China to go forward and as of early 1995 some 33 engines had been transferred. These engines are intended to power the K-8 training aircraft which China is developing jointly with Pakistan at Kamra.

Allied Signal declared its desire to sell the manufacturing technology for the engines to China (which in fact has a spin off in the manufacture of Cruise missiles).

## Defence Notes

# Self-sufficiency

BY EAS BOKHARI

At least 4, J-6/J16, F-6/FT6 and 2 squadrons of J-7 (F-7P), i.e. a sizeable part of the Fighter Squadrons (60 per cent) are of Chinese origin in the Pakistan Air Force. Hence the rationale of the establishment of PAC Kamra as back up outfit, like HIT.

Pakistan has remained terrestrial and not much aquatic and its Navy is the smallest of all the arms, just 22000 hands and no more. The Chinese contribution to it is 8 missile crafts and it is likely that some more craft probably 4 more missile crafts/frigates may be acquired from China.

The question of nuclear-cum-missile technology transfer is discussed below and there is no conclusive evidence that the recent Ghauri and Shaheen missile tests were done with Chinese collaboration. As for Pakistan's nuclear programme, it is fairly old. In fact Kamra could enrich uranium well back in 1981. Pakistan technology of enrichment is based on gas centrifuges.

**There is no evidence of recent missile tests done with Chinese collaboration.**

course without much substance, that China has provided M-6, M-9 and M-11 shortrange tactical ballistic missiles to Pakistan. Even there was a Time story that M-11 are being manufactured somewhere in the Margalla Hills near Islamabad and consignment of these was kept in packed condition at Sangodha (where PAF strike aircraft are stationed.) None of the more reliable data books like the Military Balance or the Sipri (Stockholm International Peace Research Institute - Stockholm Sweden) has corroborated this transfer of weapons and technology any way.

From what has happened here recently, it is quite apparent that Pakistan already has an advanced missile technology and the M-6, M-9 and M-11 perhaps did not serve the Pakistani purpose for their limited range and lethality.

China, I suppose, sold its long-range missiles to Saudi Arabia in one of the biggest arms deals in the recent years. There is an old Chinese proverb "Don't use good steel to make nails, don't use good men to make soldiers" and consequently China has been a late entrant in the field of sophisticated weaponry and perhaps not quite comparable with US and other European arms builders. All the same, the Chinese hardware is functional and suits us.

It is encouraging that NORINCO which was founded in 1980 has been continuously strengthening relations and cooperation with other countries all over the world. It is a major Chinese state-run corporation which has become a large multifunctional corporate handling international trade, finance, technology and other services.

*Pak. def. Nation*  
*13.11.83*

Some of the important products and technologies of NORINCO include:

- \* Tanks and other armoured vehicles.
- \* Field guns, anti-aircraft guns, naval guns and aircraft guns.
- \* Ammunition, fuzes and detonators of all types.
- \* Several types of small arms and their ammunition.
- \* Radars and Fire control systems of sort.
- \* Engineer equipments and materials.
- \* Anti-tank missiles and weapons.
- \* Powders, explosives and rocket propellants.
- \* Opto-electronic equipments, infrared and lasers.
- \* And surprisingly, equipment and materials for the police forces.

To sum up, China is one of the closest friends of Pakistan and has helped Pakistan in developing military potential and has very considerably contributed for the development of self-sufficiency in the procurement/manufacture of heavier weapons. HIT POFs Wah and Kamra are the shining examples of Chinese sponsorship, cooperation and assistance in the field of manufacture and co-production of heavier weapons and infrastructure transfer of technology to Pakistan.

E-mail queries and comments to: [casbokhari@nation.com.pk](mailto:casbokhari@nation.com.pk)