

## **'The Elephant and the Mouse...'**

### **FROSINONE & PISA TRAINING LOCATIONS ITALY**

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#### ***Good Training locations in Italy***

What does Italy have to offer to other countries in training capacity? The answer is much ! In some ways there are no equal facilities elsewhere in Europe. Facing the attempt of setting up an European jet trainings base at Cazaux in France, Italy should like to have such institutes too. Interesting in this case are the National Training Centre (NTC) for transport aircraft at Pisa and 208 gruppo/SVE at Frosinone with a large helicopter training centre.

#### **NTC at Pisa**

At Pisa is the 46 Aerobrigata located with 2 Gruppo and 50 Gruppo flying the Lockheed Martin C-130J Hercules and the 98 Gruppo flying the Fiat G-222. The 22 Hercules Aircraft are very new and of 2 different versions, the C-130J and the stretched version C-130J-30 nicknamed the super Hercules. The Fiat G-222 aircraft are to be phased out at 10 September 2005 with an event. They will be replaced by 12 Lockheed Martin/Fiat C-27J Spartan which are expected to enter service in May 2006. Pisa is an airfield with 365 day's a year flight activity with separated civil and military area's. The quite large Italian Transport fleet at Pisa requires a good training course for transport aircraft with a considerable flow of pilots. The answer on this is the National Training Centre, today an institute which provide training hours 48 weeks a year, 7 day's a week and 16-18 hrs a day, and it is a structure where the Italians are very proud of. The training start with Computer based Training (CBT) for Pilots, Loadmasters and maintenance personnel, initially in classical rooms. This will be followed by simulator training. There are 2 different simulators, the Cockpit Avionic Part Task Trainer (CAPTT) and the Operational Flight Trainer (OPT).

#### **CAPTT copy of a cockpit**

The CAPTT is a static trainer with an exact copy of the real cockpit from the C-130J with digital technology. All kind of circumstances can be created in the learning process. For example when you simulate an engine fire, a pilot has to take the right decision. If he does not a cockpit voice is saying to you; "what are you doing?" and merge you to the right instrument handling. The CAPTT is also a good trainer to maintenance personnel. Malfunctions can be simulated followed by an exercise in troubleshooting. There are two mission computers on the CAPTT. The first is in charge of the cockpit control and the second one is monitoring the situation and takes over when necessary. Special equipment like the Portable Maintenance Aid (PMA) reads the mission computer and downloads the major data from historic memory. This is very useful for debriefing after the sessions.

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## **Operational Flight Trainer (OFT)**

The OFT is a class D simulator which means a top class in simulators. The OFT can do the same as the CAPTT and a lot more. The Cabine is movable, and with this movement the pilots experience is like in a real flight. For basic qualifying on the C-130J as a co-pilot you need 93 hrs with about 75 missions, for aircraft commander some 20 hrs with 7 missions more are needed. On the aircraft and simulators as well some different aspects of the transport aircraft can be exercised. This include tactical training in several levels like low-level training, night flying, air-to-air refuelling, airdrops, Search and Rescue and tactical airlift. European countries rent hours on the simulator. While the NTC has the only and newest training centre in Europe for the C-130J is the OFT a top facility in Europe. The NTC likes to enlarge the foreign activities on the simulators and one of the objectives is to become a European Training Centre on the C-130J where all other Nato countries using the C-130j will invest there training program. For the C-27J Spartan similar facilities will be set up in de brand new and spacey building including an OFT but momentarily some problems with software cause delay. The engines and the cockpit will be very much the same with the C-130J.

## **Experience in war time**

Under operation Antica Babylonia Italy deploys a few C-130J in the United Arab Emirates to fly operational missions between Irak, Koeweit and the UAE itself. This include transport of people, humanitarian aid or medevac missions and support flights at Tallil, Bagdad. The C-130J in the theatre have in flight refuelling probes and self defence systems like flares and chaff. One of the most threatening circumstances are attackers around the airfield with small rockets like the SA-7 Strela or RPG non guided rockets or simply Ak-47 Kalashnikov machineguns. Small arms in the face of landing is one of the first things recognized from the Bosnia crisis where Italy had two bases, Spalato and Zagabria and where many support flights were flown at Sarajevo. While this is a problem which is difficult to prevent you can train on it. The best way is a steep approach from medium altitude and after landing, even when unloading don't turn the engines off. The plane on the field is very vulnerable to mortar fire and the airplane has to be prepared for immediate take off in case of danger. The 46 Aerobrigata build up many experience throughout the years in several theatres and the loadmasters are very prepared for this. Assault landing and take off is a daily exercise at Pisa and a Hercules crew must be combat ready. In several things Italia takes the lead like having the first C-130J specialised against terrorists and being the first air force to fly with the C-130J over 7000 m mountains from Kyrgizia to Khost AFB in Afghanistan. On this very small airfield surrounded by high mountains you also have to perform a steep take off. It is possible to let a C-130J take off with a 15 degrees angle of the nose but despite all the training courses for beginners this only can be done by a very experienced and skilled pilot.

## **Frosinone, national helicopter trainingcentre**

The Italian Helicopter Training Centre is located at Frosinone in the Appeninian mountains. If you have not been there you wouldn't expect such a large base and so

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very well situated with lots of flight activities every day. Italia makes no secret of the fact that they should like to become an international training centre. This means so far that Nato countries could concentrate training activities at Frosinone. In the prospect to increase the flight activities a brand new large hangar is under construction. The Scuola di Volo Elicotteri uses NH-500E helicopters of the 208 Gruppo (Squadron) as part of the 72 Stormo (Wing). Some 50 of this Hughes helicopters were licence build with Breda Nardi, a branch of the Agusta Group, and delivered to 208 Gruppo from 1990 onwards and where most of them are still flying.

The helicopter school is under general command in Guidonia where the high command for all flight schools is located. Students start with classical education followed by one to one lessons in one of “the boxes”. In the OPS-room they keep a track on the evolution of the course. After 5 weeks ground school and pre-flight computer school there is the possibility of the HPQ 76 mix program (Helicopter Pilot Qualifying) and the HPL/HPML 105 mix program (Helicopter Pilot Licence and Helicopter Pilot Military Licence). Some pilots are coming directly from the civil world and needs a military licence first. Just 76 sorties are needed for pilots already licensed for fixed wing aircraft and flying in the military. Those who start at zero need 105 sorties.

### **Mixed interest for the course**

The course sets a limit for 90 students a year. In the first 6 months of 2005 for example there were 45 cadets with a different background situated in the next impression:

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|-------------|---------------------|------------|--------------------|
| - 6 cadets  | Italian Army        | - 2 cadets | Afghan Air Force   |
| - 8 cadets  | Italian Air Force   | - 2 cadets | Albanian Air Force |
| - 11 cadets | Fire Fighter Corpse | - 5 cadets | Police             |
| - 7 cadets  | Carabinieri         | - 4 cadets | Forestry service   |

During the course every form of flight has an examine with an examiner/flight instructor.

There are rigid standards and they are strictly applied to students. If you are not clear to go you get a final progress control. If this is not appropriate you will be dismissed. At first you start on the NH-500E with visual flights often resulting in the so-called “samba dancing”. This figure, marking a beginner can be recognized from greater distance and causes generally smiling faces of pilots on the field. Those pilots who come from military organisations have already experienced their initial flight training on the SF-260 at Latina and often jet training on the MB-339 at Lecce. In the face of this qualifications the helicopter course will be much easier.

A memorable point in the course is the first solo-flight which costs you a bold head and facing smiling fellow pilots. Further special training and skills will follow in the progress. This will include landing at specific area, hovering out of ground effect, instrumental flying, mountain ops, water ops, night flying, navigation visually and with instruments and at the very last hook and winch operations.

**The NH-500E is very direct**

According to our guide and flight instructor Davide Argangel the handling of the flight controls is very direct. This can cause a nervous flight character in hands of a beginner, the already mentioned samba dancing. Just this back to basics handling makes the NH-500 very suitable for aspirant pilots. The chopper has very good visual flight characteristics which allows the instructor a good teaching without using the instruments. It is a very efficient helicopter, reliable and with a simple engine. This make easy maintenance resulting in a high percentage of the NH-500E fleet is flying every day. Totally some 60 sorties a day are flown by the instructors, Each instructor flies 2-3 times a day. At the airfield, without a hardened runway but mainly grass area and some hardened spots there are several helicopters at one time in the air. For water operations 4-5 helicopters are mounted with floats. At the maintenance centre of the airfield they can fit those easily. Flying with floats is different with speed limitations of 130 knots and different behaviour of the helicopter on the controls.

**The benefits of Frosinone**

Another aspect of Frosinone is the mountainous surrounding. Some Nato countries without mountains (like Holland) come here once a year to train mountain operators. Nearby 9.400 ft high (3300m) Gran Sasso is the highest mountain in central Italy and you find her an excellent training area with often rainy days and good for practically all weather training.

The 208 Gruppo is ready to obtain more foreign customers like Nato countries but foreigners from other continents as well. Frosinone has much to offer to customers. In the prospect of a new aspect; the female pilot while some women are studying at the Air Force Academy in Pozuolli/Naples the Helicopter Training School at Frosinone looks with thrust forward in the future.

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Dutch Aviation Support  
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