

AUGUST 2011



- HISKASIM BECOMES OSIMCO
- DEVELOPED PRODUCT DIVERSITY
- FINALIZED SOON – NEW SALES AREA – A SHOWROOM FOR OUR CUSTOMERS
- NEW INVESTMENT – SPECIALISED PLANNING SYSTEM



## Dear Reader!

This issue informs you i. a. about our development success in our Panel- and Mockup manufacture and the highlights being a hardware system supplier for the simulator sector.

Please enjoy reading.

# HiskaSim becomes OSIMCO ... adjusting to the trend of demand

HiskaSim, since 6 years acting in the development and production of both electronic manufacture and avionic replicas for flight simulation reacts to the changes of demand situation.

The significant shift of production rates in favour of the simulator market made it necessary to source out this part of business in order to meet the challenges of the future.

The implementation of a new inventory management system together with a computer-based project controlling and an automated stock management have built the basement for our project teams to serve the ever growing demand of the simulator industry. With the established in-house-production at the same location OSIMCO will accept the high quality challenge of the simulator construction, while HiskaSim, also at the same facility will still cover the demand of the electronic market in development and production and also provides the electronic components for avionic replicas.

# Developed Product Diversity

As a system supplier and hardware producer we ran through a considerable development time the last 24 months – in this quite short period we realised simulator hardware for a wide range of different types of helicopters and aircrafts, e. g. EC-135, CH-53 GA and GS, AS-350, EC-225, Bell-212, EC-635 and E3A. During this time we developed and manufactured more than 304 Panels and 4 Touch-Screen CPT's.

We would like to “quote” some extracts from the specialized press and describe the demands which we had to face while realizing the manufacture.

## „Boeing-leaded Team finalized Modernisation of the NATO-Awacs-Fleet“

### Boeing-geführtes Team schließt Modernisierung der NATO-AWACS- Flotte ab

Ein Team unter der Führung von Boeing hat eine umfangreiche Modernisierung der AWACS-Flotte der NATO abgeschlossen. Die Umrüstung erfolgte im Rahmen des mittelfristigen 1,32 Mrd. Dollar Modernisierungsprogramms der AWACS-Flugzeuge. Der Umbau des 17. und letzten AWACS-Flugzeugs wurde planmäßig am 3. November von EADS als Industriepartner und Unterauftragnehmer von Boeing abgeschlossen.



Boeing hat zudem zwei NATO AWACS-Einsatzsimulatoren geliefert, die der mittelfristigen Konfiguration entsprechend nachgerüstet wurden. „Dieser Meilenstein ist der Höhepunkt eines wahrlich internationalen Bestrebens von vielen talentierten Menschen aus Nordamerika und Europa, der NATO Airborne Early Warning and Control Programme Management Agency, des Streitkräftekommandos, des NATO E-3A-Verbundes, der US-Air Force und mehr als 15 Unterauftragnehmern aus zwölf Nationen“, sagte Lee Strom, Manager des NATO AWACS-Programms bei Boeing.

Source: AeroBrief dated December 11th, 2008

In line with the modernisation we – as a system supplier of Avionic Replicas - got the order to construct and supply the main hardware part of the cockpit equipment for a FNPT following the existing interface standard.

Another challenge in this project was the procurement of some 30-years old components as used in the original aircraft. With our good and long-time existing connections to our suppliers we were in the position to offer a solution for all requirements.

Because of our longtime experience with Boeing replicas we were able to find solutions even for the very

tricky mechanical requirements. For example we name in this respect an Oxygen panel, which is a pneumatic panel, for which we had to change the mechanical control into an electronic/electric control.

## „Polish AirRescue obtains first EC135“

### Polnische Luftrettung erhält ihre erste EC135

Eurocopter hat heute in Warschau den ersten von 23 EC135-Hubschraubern an das polnische Gesundheitsministerium ausgeliefert.



Die neue Flotte wird dem landesweiten Netz von ärztlichen Notfalldiensten (Emergency Medical Services, EMS) in Polen zugute kommen. Der neue Hubschrauber soll Anfang Januar 2010 offiziell in Dienst gestellt werden. Seine Heimatbasis wird Warschau sein. Fünf weitere EC135 stehen noch 2009 zur Auslieferung an, die verbleibenden 17 sollen im Lauf des Jahres 2010 folgen.

Betrieben wird die auf alle 17 Stützpunkte in Polen verteilte Flotte von Lotnicze Pogotowie Ratunkowe (LPR) in Warschau. Die neuen EC135 ersetzen die bestehende Mi-2-Flotte und bringen Polen auf die neuesten europäischen Standards im luftgestützten Rettungswesen.

Source: Aerokurier dated September 10th, 2009

For this project we supplied 31 simulator hardware components namely the complete panel equipment for the Overhead-Panel, the Instrument Panel as well as all panels of the Slant and Middle Console including the whole electric and communication network "CANopen".

Just 2 genuine panel were integrated in the electric and electronic system supplied by us.

We triggered the complete equipment via the bus system CANopen by using a combination of standard industrial components and our for real-time simulation specifically developed controllers.

Basically we distinguished between Simple Switch Panels, Complex Display Panels and Video-Monitor Devices.

Cabling of the devices and the power supply components have also been our scope. An additional mission was to integrate all panels into the simulator environment in accordance with the customer needs.

## Defence Industry Daily March 25/2009



French media report that Iraq has signed a EUR 360 million (\$488 million equivalent) for 24 EADS Eurocopter EC 635 light twin-engine helicopters, plus training and maintenance, during a meeting in Paris between French defense minister Herve Morin and his Iraqi counterpart Abdul Qader Obeidi.

We delivered nearly 90% of the hardware components for the simulator (namely the complete panel equipment). We used the same technique as with the EC 135 of Polish air rescue. As an additional requirement we realised the NVG-simulation of the system.

Further customer requirements have been realised with our approved technique.

## „Eurocopter inaugurate new Training-Centre for CH-53GA“

### Eurocopter weiht neues Trainingscenter für CH-53GA ein

Gestern wurde bei einer Feier in Donauwörth das so genannte Trainingscenter für den CH-53GA der Heeresflieger seiner Bestimmung übergeben.

Anfang April startet bereits der erste knapp siebenmonatige Lehrgang für Soldaten der Heeresfliegerwaffenschule Bückeburg (HFIWaS), die später die ersten Hubschrauber des Typs betreiben und die Einsatzprüfung durchführen sollen.



Innerhalb von nur wenigen Monaten entstanden eigens für die Erstausbildung auf der CH-53GA das Konzept sowie das Gebäude des neuen Trainingscenters. Der Unterricht erfolgt durch Mitarbeiter des National Support Center (NSC) von Eurocopter in Deutschland und der hauseigenen Training Academy; unter Beteiligung von Entwicklungsingenieure, Testpiloten sowie das Wartungs- und Einflugpersonal.

Es stehen drei neue Cockpit Procedure Trainer (CPT) und ein Computer Based Training (CBT) für praxisnahe Übungseinheiten zur Verfügung, die für die fliegerische und technisch/logistische Ausbildung genutzt werden.

Im Anschluss an das Training werden die ausgebildeten Soldaten, zusammen mit einem Team von Eurocopter-Mitarbeitern in Deutschland nach Bückeburg gehen, um dort ab Herbst 2011 die ersten CH-53GA im Rahmen eines integrierten Modells zu betreiben.

Source: Flugrevue dated April 8th, 2011

## CH-53-GA : Eurocopter occupies VEGA Space Cockpit Prodedure Trainer

### CH-53GA: Eurocopter nutzt Cockpit Procedure Trainer von VEGA Space

Als erstes Trainingsmittel für den von Eurocopter mit neuer Avionik aufgerüsteten Transporthubschrauber CH-53GA ist ein von VEGA Space in Darmstadt entwickelter Cockpit Procedure Trainer in der Nutzung.

Drei der CPT stehen im kürzlich eingeweihten Trainingszentrum in Donauwörth und werden für die Ausbildung des Lehrpersonals der Heeresflieger eingesetzt.

Die Entwicklung des CPT erfolgte parallel zur Umrüstung der ersten Prototypen des CH-53GA in enger Kooperation mit Eurocopter. In zwei Jahren stellte das 15-köpfige VEGA-Team, bestehend aus Simulationsspezialisten und Ingenieuren, die Trainingslösung in voller Verantwortung fertig.



Der CPT ist ein flexibles Ausbildungs-mittel, das sowohl stationär als Nachbau-Cockpit auf der Basis von Touch-Screens mit dazugehöriger Ausbilderstation eingesetzt werden kann, aber auch mobil auf Laptops oder PCs.

Dabei kann die Simulation vernetzt und zur Fernausbildung genutzt werden. Der Ausbilder hat so stets die Kontrolle und Übersicht über das Handeln des Schülers: Szenarien-Auswahl und Einspielen von Fehlern während der Simulation sowie verschiedene Betriebsmodi erlauben den Grad an selbst- bzw. lehrergesteuertem Lernen, das die jeweilige Situation erfordert.

Im Herbst 2011 wird die Erstausbildung abgeschlossen sein. Alle vier bestellten CPTs werden anschließend an der Heeresfliegerwaffenschule in Bückeburg zur Ausbildung der Besatzungen genutzt, bevor zwei dieser CPTs an die Einsatzverbände übergeben werden.

Source: Flugrevue dated June 6th, 2011

We supplied various products to different customers:

### 4 Training Systems – Touch Screen Mock-ups

We developed the hardware of CH-53 GA Cockpit Mock-ups (CPT) consisting in:

Mechanical base-frame, video-technique, touch screen display technique, electro mechanical controllers inclusive FTR, simulator seats optimized for simulation purposes, complete electric and electronic control, collective and cyclic grips also optimized for simulation purposes.

Apart from 2 original switches we installed only self developed hardware, that means we had a very high volume on self construction and development.

It is a novel CPT concept, which also can be used as a FNPT. It was exhibited at the ILA Berlin 2010 as well as at the Aero 2011 in Friedrichshafen and at the Helicopter Forum in Bückerburg 2011. This concept is compatible and also applicable for other types of helicopters.

## Avionics for the CH-53 GS Simulator

Additional we supplied some special avionics for the modification of the existing CH-53 GS simulators. We used specific hardware components, as for example a RLW-Display with original cathode ray tube. This panel was implemented by combining standard tube-technique and modern micro controllers.

Furthermore we developed and manufactured two very special avionics, the MILDS (Missile Launch Detecting System) and the CDS (Counter Measure Dispensing System) according to the requirements of our customer. The controlling of the components was effected via Ethernet and CANopen.

## Avionics for the CH-53 GA Simulator

We developed a bigger part of the avionic instrumentation, which, according to customers requirement has been realized with two different control systems. One is the customer owned Interbus-S System the other our standard system CANopen.

Additional we used a CANopen based control system for the simulator fuses. With these FCB (Fuse control Boxes) called devices the functionality of simulator fuses can easily be controlled. We plugged in 4 FCB's each cockpit which in total are able to control 320 fuses. In the GA cockpit instrumentation 210 fuses are controlled now.

# Finalized Soon – New Sales Area – a Showroom for our Customers

From October, 15th, 2011 onwards we are able to inform you about the newest technologies in our modern showroom in 2nd floor. Enjoy the intensive and extensive counselling interview with us.

We will demonstrate you a CPT hardware system specifically targeted on helicopters and which is in the position to represent various types like EC-225, SuperPuma, Cougar, CH-53 and so on. This CPT is a generic training system, which is equipped with a multitude of our innovative self-developed products (touch-screens, seats, grips). These self-developed components are also available on their own.

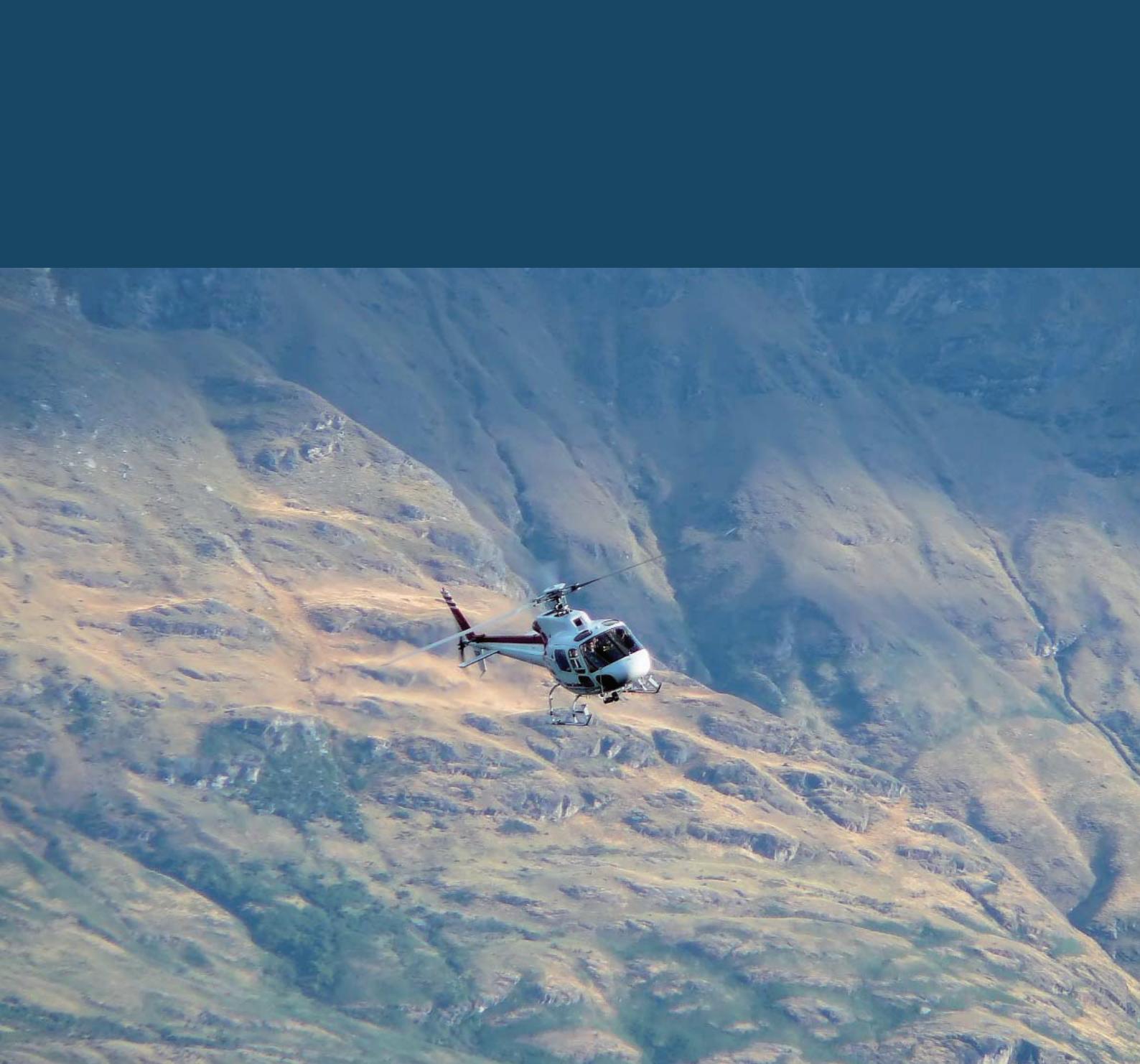
Different avionic replica variations can be viewed to inform you about the possibilities of real time simulation via CANopen. At your request we can show you our lighting technology. You can assure yourself about the true-to-original design of our avionic replicas.

# New Investment – Specialised Planning System

In May 2011 we have invested in a new planning and timing software. We spent nearly € 150.000 to be in the position to react more flexible in the future and to control the time planning even in design and development projects to optimize our production processes and achieve better results.

The implementation of the new software is already in full operation. We have started the training on our employees. All new projects are exclusively controlled by the new planning software which will result in a remarkable relief of our production and time planning.

Herewith in the future we anticipate bottlenecks and delays in delivery even in development projects and nevertheless are able to respond to special requests.



osimco gmbh  
Haberstrasse 46  
D 42551 Velbert  
[www.osimco.de](http://www.osimco.de)  
[info@osimco.de](mailto:info@osimco.de)  
Tel.: +49 (0) 20 51 80 38 0  
Fax: +49 (0) 20 51 80 38 49