4th China Helicopter Exposition Opened
第四届天津直升机博览会开幕

The 4th China Tianjin International Helicopter Exposition opened yesterday morning in the Airport Economic Area of Tianjin. Mayor of Tianjin Wang Dongfeng, GM of AVIC Tan Ruisong, lieutenant general Peng Bo, the deputy commanding officer of PLA ARMY kicked off the show.

第四届中国天津国际直升机博览于9月14日开幕，本届直博会在天津市空港经济区举行，天津市市长王东峰、中国航空工业集团公司总经理谭瑞松和中国陆军副司令员彭勃中将出席开幕式并发表开幕致辞，陆航风雷表演队和航空工业直升机进行了精彩的飞行表演。

Ruohang to Buy 12 Bell 505s from Reignwood
若航集团与华彬航空签订购机协议

Ruohang Group’s Lhasa Xueying General Aviation signed a contract here yesterday with Reignwood Aviation for two Bell 505 JetRanger X and a purchase agreement option for 10 more. The first of the light single-engine helicopters will be delivered next February, making Xueying General Aviation one of the first 505 operators in China. Lhasa Xueying General Aviation is owned by Ruoer General Aviation Development Group and Lhasa Tourism and Culture Group. Ruohang Group and Reignwood also signed a strategic cooperation agreement to market development for helicopters.Reignwood is Bell Helicopter’s largest customer for the 505, with contracts covering 60 JetRanger X.

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Leonardo Helicopters is committed to serving your business - to enable the most demanding operations, worldwide.

A global network of over 1,800 dedicated specialists provide the highest-quality of customer support, advanced service solutions and a comprehensive customer-tailored range of training programs - collectively known as 'TeamUp' - ensuring mission success; anytime, anywhere.

Inspired by the vision, curiosity and creativity of the great master inventor - Leonardo is designing the technology of tomorrow.
AVIC Wins Orders for 26 Helicopters

中国航空工业成功签订26架民用直升机销售合同

AVIC’s Changhe and Harbin helicopter companies signed deals for a total of 26 rotorcraft here at the show yesterday, including a breakthrough into the international police aviation market.

The orders involved 18 light, single-engine AC311A helicopters, two twin-engine AC312s, four hot-and-high AC312Es, and two three-engine AC313s.

The deals were:
- Ten AC311A s for Jiangxi Financial Leasing Co., for use in public services and general aviation;
- Three AC311As and two AC312 police helicopters for export to Zambia for police missions;
- Four AC312E and two AC313 helicopters for Tibet Development and Investment Group General Aviation Co. to be used by Tibet’s Zangqiu District Government of Jinan, Industry Group signed an agreement with Huaxia Jizhouch Group through Huaxia Jiuzhou General Aviation Company.

In addition, AVIC Changhe Aircraft Industry Group signed an agreement with Zhangqiu District Government of Jinan, Shandong Province, on building a modern general aviation service center that will offer helicopter maintenance, modification and sales of aviation materials and spare parts.

Another MRO deal saw Avicopter, CITIC Offshore Helicopter, AVIC International Aero-Development Corporation and AVIC Investment Co. agree to set up the joint venture Helicopter United Technologies Co., for maintenance of airframe and spare parts, aircraft lifetime extension, modification, and sales of helicopter materials and spare parts.

In September 14, 2017, the aviation industry exhibited at the China Helicopter Exposition with users and partners to sign a number of sales contracts and cooperation agreements.

The aviation industry consortium and China Hotel and Aviation Co., Ltd. signed a deal with China Aviation and Media Co. Ltd. to publish the aviation media. Material in this publication may not be reproduced in any form without permission.

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AVICopter Launches Flight Training and Experience Center

On September 14th, AVICopter’s Flight Training and Technology Experience Center was officially established. AVIC Deputy General Manager Chen Yuanxian, Tianjin Binhai New District Deputy Mayor Xia Qinglin unveiled the center together.

AVICopter’s Flight Training and Technology Experience Center is an experience center which is focusing on pilot and air traffic control training. The center is equipped with 7 helicopters including AC311, R44, and S300, and DA40 and Cessna 172 fixed wing aircraft. It is reported that it’s the largest domestic general aviation simulation training center at present.

9月14日，航空工业直升机飞行培训及科技体验中心正式挂牌成立。航空工业集团公司副总经理陈元先、天津滨海新区副区长夏青林共同为航空工业直升机飞行培训及科技体验中心揭牌。

航空工业直升机飞行培训及科技体验中心是航空工业直升机公司设立的以飞行员培训为主的互动体验中心。中心设有AC311直升机，R44直升机、S300直升机、DA40、赛斯纳172等七架专业直升机、固定翼训练器以及空管训练器，是目前国内规模最大的通用航空模拟训练中心。
AVIC, CITIC Set up MRO for Russian Helicopters
俄制直升机维修项目落户天津

9月14日，中国航空工业集团公司和中国中信集团公司与天津空港经济区管委会签署了《关于俄制直升机维修销售及技术中心项目的投资合作协议》，共同开拓俄制直升机维修市场。

俄制直升机在中国市场有一定的市场占有率，但进入中国60余年来，国内的维修能力和维修技术尚不能完全满足需求。此次，航空工业牵手中信集团将共同组建直升机维修合资公司，获得俄罗斯直升机公司正式维修授权，实现国内俄制直升机规模化维修。

合资公司落户天津空港经济区，主要从事俄制直升机及部件、附件的修理与维护、技术升级、延寿和整机、航材销售等业务，这将是极大提升用户飞行保障能力。

A center to maintain Russian-made helicopters will be set up in Tianjin under an agreement signed here yesterday.

AVIC and CITIC Group Corp. will form a joint maintenance, repair and overhaul venture and operate it with formal maintenance authorization from Russian Helicopters, that country’s umbrella helicopter company. It will be located in the Tianjin Airport Economic Area.

Russian helicopters have been operated in China for 60 years, but they have never received full in-country support from their manufacturers. The new center should alleviate that problem and provide standardized maintenance for the growing fleet of Russian-made helicopters with repair and maintenance of the aircraft and their components and accessories. It will also carry out upgrades and modifications.

More Kamov Helicopters for China
更多的卡莫夫直升机进军中国

China this month will take delivery of the first two of six Russian-made Ka-32 utility helicopters from a contract signed last year. They will go to a number of companies including Jiangsu Huayu General Aviation Company, Qingdao Public Security Bureau, and Jiangsu Baoli.

The Ka-32A11BC multirole helicopter is designed for special search and rescue operations, firefighting missions and law enforcement operations. They are currently in service in Austria, Azerbaijan, Brazil, Canada, China, Indonesia, Japan, Kazakhstan, Portugal, Russia, South Korea, Thailand, Turkey, the United States and the United Kingdom.

卡-32A11BC多用途直升机专为搜索、救援和执法任务而设计，该机目前已有在奥地利、阿塞拜疆、巴西、加拿大、中国、印度尼西亚、日本、哈萨克斯坦、葡萄牙、俄罗斯、韩国、西班牙和土耳其等国家服务。

卡莫夫公司卡-32A11BC直升机已在中国运营多年，主要从事消防和救援行动，以及在高温高原等地区工作。据统计，目前中国在册的卡-32A11BC直升机共有13架。

卡莫夫公司是俄罗斯直升机公司的一部分，其展位在1号馆D203。

The Ka-32A11BC of Russian Helicopters has been operated in China for several years and have been involved in firefighting and rescue operations, as well as hot-and-high work in the highlands. There are currently 13 active on the China civil register, according to website RotorSpot. Kamov is part of Russian Helicopters, Hall 1, Booth D203.

——John Morris
Aero Engine Corporation of China (AECC), the nation’s new aero engine company, is making its debut here with four exhibits: a military and a civilian turboshaft engine, a helicopter drive system and a rotor system.

AECC (Hall 1, Booth A102) is presenting a model of the dual-use, 1,600 kW class WZ-16 turboshaft; the helicopter drive system displays its speed change process, and the helicopter ball flexible rotor system is making its first public appearance.

The WZ-16 engine is a new turboshaft engine developed jointly by AECC and French Safran Group. It powers the Avicopter AC352 helicopter which is in flight test towards certification next year. The WZ-16 and its French Ardiden 3C counterpart will be certified to the standards of the Civil Aviation Authority of China and the European Aviation Safety Agency (EASA). Two assembly lines will produce the engine, one in China and the other in France. EASA certification is expected at the end of this year.

A main feature of the WZ-16 is its low operating and life cycle costs, and a time before overhaul of 5,000 hours. It has a 15% power growth potential and is suitable for 7-ton twin-engine helicopters and 13-ton triple-engine helicopters. The engine is currently the most powerful turboshaft to be developed in China.

A new flight training center will be built in Tianjin under an agreement signed yesterday between Avicopter and the Tianjin Airport Economic Zone.

The center will provide multi-type and simulator training for pilots as well as theory and practice, and professional ground services.

It will also include aviation education and science, with an emphasis on teenagers.

Avicopter, the leader of China’s helicopter industry, is based in Tianjin.

中国航空发动机集团（AECC）首次参加天津直博会，共带来4型展品，包括军民通用的涡轴发动机、传动系统和旋翼系统关键技术。在位于A102展位的中国航发展台上，涡轴-16发动机和1600千瓦级涡轴发动机两型产品以模型展出，直升机传动系统展示其变速过程，直升机球柔性旋翼系统首次公开亮相。

涡轴-16发动机是中国航发与法国赛峰集团50/50对等合作研制的一款新型涡轴发动机，于2016年12月20日随AC352直升机完成首飞，涡轴-16发动机的研制严格遵循欧洲和中国民用发动机适航条例的规定，以全寿命成本最低作为基本原则和指导方针，成熟期翻修寿命为5000小时。涡轴-16发动机保有15%的增长潜力，可适用于7吨级双发直升机和13吨级三发直升机。1600千瓦级涡轴发动机是独立自主研制的国产最大功率涡轴发动机，填补了国内该功率等级涡轴发动机的空白，共功率等级和结构安装性可满足不同吨级直升机的动力需求。

中国航发首次参展天津直博会

中航直与天津空港共建飞行培训中心

A new flight training center will be built in Tianjin under an agreement signed yesterday between Avicopter and the Tianjin Airport Economic Zone.

The center will provide multi-type and simulator training for pilots as well as theory and practice, and professional ground services.

It will also include aviation education and science, with an emphasis on teenagers.

Avicopter, the leader of China’s helicopter industry, is based in Tianjin.

9月14日，在第四届中国天津国际直升机博览上，航空工业直升机与天津空港经济区管理委员会共同签署《关于共建飞行培训中心合作协议》。双方将密切合作，在天津空港经济区建立面向通用航空的飞行培训中心项目，主要以提供专业的空地勤培训服务为核心，为职业飞行员搭建多机型训练器与模拟机组合的专业训练平台，提供包括理论和实践在内的、成体系的培训场所，同时面向以青少年为主的大众开展航空科普教育实践活动。
《飞旋之梦——中国直升机事业60年》

值中国人民解放军建军90周年、中国直升机工业创建60周年之际，为向党和国家以及为中国直升机事业奋斗的人们献礼，贯彻落实中国航空工业集团公司军民融合发展战略，公开向社会各界展示中国直升机事业发展历程和取得的辉煌成果，中航直升机有限责任公司与航空工业出版社联合编著出版了《飞旋之梦——中国直升机事业60年》大型画册，并将于2017年9月14日在第四届中国天津国际直升机博览会上举行首发仪式。

本画册图文并茂，资料翔实，既有对重大史实的记述又有大量珍贵的历史照片。书中全面记述了从新中国1955年直升机部队组建到2017年中国人民解放军建军90周年，长达60多年的中国直升机事业从无到有、从小到大、从弱到强的艰辛历程，取得的一个又一个辉煌成就，为国防现代化建设、为社会经济发展、为人民生活水平提高，做出的不可替代的重要贡献。

本画册的出版是为铭记历史、弘扬传统，缅怀、告慰直升机界的前辈，展示今日中国直升机事业的崭新面貌，激励、教育中国直升机人为中国的航空事业，为实现伟大的“中国梦”而努力奋斗，具有重要意义和价值。
China Will Need More Firefighting Helicopters

Whether it’s climate change or increased media coverage, forest fires seem to be getting worse.

That’s no different in China than anywhere else. And neither is the lack of resources to contain a blaze before serious damage is done.

China’s fleet of firefighting helicopters — four giant Mi-26Ts and a handful of Mi-8/17s, Kamov Ka-32s, Super Pumas and Avicopter AC313s — isn’t nearly enough.

“There is a tremendous need for at least 60 more helicopters, maybe 100, over the next 10 years to perform this kind of mission,” says Vincent Dufour, Airbus Helicopters’ vice president-commercial for China.

His company’s H215 Super Puma has just completed a two-week demonstration tour in South China in multipurpose configuration including firefighting with an underslung Bambi Bucket. The 2,000 km tour included the ancient town of Linjiang in south-west China, where the H215 showcased its capabilities as a firefighter to the South Station of State Forestry Administration China.

“It was a very successful demonstration, and we are now talking with officials,” says Dufour.

—John Morris

The H215 demonstrating its firefighting capabilities.

Airbus Helicopter Leads MRO in Region

Airbus Helicopters has the most extensive maintenance, repair and overhaul coverage of any helicopter manufacturer in the Asia-Pacific region, with eight factory-owned MROs and 10 authorized service centers.

That’s the conclusion of the just-released Infrastructure report by Hong Kong-based aviation consultants Asian Sky Group.

Leonardo Helicopters comes in second with two factory-owned MROs and 16 authorized facilities. This is just ahead of Bell Helicopter with one factory-owned MRO and 14 authorized facilities.

Sikorsky has one factory-owned MRO, with five authorized facilities.

Mainland China has the second-greatest concentration of helicopter MRO facilities in the region with 22, versus 34 in Australia.

Asian Sky Group is here at Hall 2, Booth A803.

Airbus Helicopter Leads MRO in Region
Giant Mi-26TCs Handle China’s Hot Spots
重型直升机Mi-26TC成为中国的热点

There are now four giant Mi-26TC helicopters available to fight fires in China – and they have been busy this year. The aircraft are produced by Rostvertol, part of Russian Helicopters.

Several large fires of note were extinguished with the help of the heavy-haulers.

The first, in Spring 2017, broke out in mountainous forest near Yantai city (Shandong province), threatening homes, a Hyundai car factory and other industries. The Mi-26TC greatly helped firefighters with eight water drops of ten tons each.

A second forest fire was sparked on June 23 in by a lightning strike in Daxing’anling, Heilongjiang province, leading to a blaze that threatened rare species of trees and animals. The Forestry Department of Heilongjiang province sent 2,284 firemen to fight the fire, and backed them up with eight helicopters: two Mi-26TCs, two Mi-171s, two Ka-32s and two Z-8s. The Mi-26TC helicopters made 12 water drops totaling 96 tons; the combined effort extinguished the fire in a day.

Last year the Mi-26TC was also used to provide fire safety during the G20 summit of world leaders in Hangzhou.

The Mi-26TCs are operated in China by QingDao Helicopter Co., which has two of them, and China Flying Dragon General Aviation Co., and Lectern Aviation Supplies Co. All are available to the Forestry Department of China for firefighting.

Last month Mi-26 helicopters helped save their birthplace when a major blaze engulfed parts of the Russian city of Rostov-on-Don, where they are built. Seven helicopters (five Mi-8s and two Mi-26s) were sent by the Southern Military District and Federal National Guard Troops Service to fight the fire. The Mi-26s made 12 drops totaling 90 tons of water, flying day and night through thick smoke and haze to reach their targets.

Russian Helicopters is here at Hall 1, Booth D203.

Chongqing to Supply 15 Enstroms to Police
公安部警航办与重庆通航集团签署战略合作协议

Chinese police forces signed agreements here with Chongqing General Aviation Industry Group involving 15 Enstrom 408B turbine helicopters for law enforcement. The Chinese Ministry of Public Security Police plans to take 10 of the light-sport helicopters, and Yunnan Honghezhou Police Station five.

Chongqing General Aviation is the owner of U.S.-based Enstrom, and is its Chinese dealer and distributor. A law enforcement-equipped 408B can be seen here at the show.

9月14日上午，公安部警航办与重庆通航集团签署战略合作协议。根据协议，重庆通航集团将一次性优惠提供10架恩斯特龙408B直升机支持中国警航事业发展，并就整机采购、批量交付、售后服务、人员培训、机场建设、低空安全保障系统六个方面提供全方位的优质服务。之后，云南红河州公安局与重庆通航集团还签署了意向购机协议，现场确定5架警用型恩斯特龙480B直升机订单。
军民融合、一带一路引领通航产业大发展

“Military and Civilian Integration, Belt and Road”
Boosting General Aviation
Collins Supplies HeliSure™ Avionics for AC312E/C
罗克韦尔柯林斯为AC312E/C提供HeliSure™航电设备

Advanced avionics from Rockwell Collins are featured in the cockpit of Avicopter’s new nine-seat AC312E helicopter, which is undergoing flight testing with certification anticipated “in the near future.”

The AC312E, optimized for high altitude performance and reduced operating costs, is a development of the 12-seat H410/425 helicopter that can trace its origins back to license-production in China from 1981 of the French Aerospatiale AS365 Dauphin.

Collins is supplying its latest HeliSure™ CDS (cockpit display system) and Pro Line 21 communication, navigation and surveillance equipment. The cockpit display system provides growth to support Synthetic Vision, Helicopter TAWS (terrain awareness and warning system) and EFB (electronic flight bag). Options for the platform also include the RTA-4112 MultiScan weather radar and the TTR-4100 TCAS II traffic surveillance system.

“The comprehensive solution we’re providing for the AC312E/C features an advanced architecture that supports future capabilities as they become available, which is especially important for the types of missions that will be flown by the AC312E. Through our long-time, collaborative working relationship with Harbin Aircraft Industries Group (HAIG), we were able to develop an innovative avionics suite that delivers safety, situational awareness and reliability to AC312E operators,” the company says.

HAIG has also selected Rockwell Collins to provide the avionics for the next-generation development of the AC312, the AC312C.

Unmanned Z-5 Scores a First in Low Level Work
Z-5型无人直升机完成电力巡检示范飞行作业

The widely-used Z-5 unmanned helicopter designed in 2011 by No.60 Research Institute of the People’s Liberation Army General Political Department has just scored a new first thanks to a Ku-band satellite communications system: low altitude surveillance in mountainous terrain.

Flying at low level through plains, hills and mountains makes line-of-sight communication impossible. But fitted with Ku-band equipment—a first in China for an unmanned aerial vehicle—the Z-5 demonstrated the feasibility of unmanned operations in those environments.

The helicopter performed 18 sorties and 20 flight hours from Aug. 3-18 conducting checks of electrical transmission wires in Guangdong Province, where it also encountered high heat, high humidity and marine conditions. It successfully inspected 110kV, 220kV and 500kV AC-voltage power lines, securing precise coordinates of towers and electric lines as well as shooting high-definition images of insulators, pins, connectors and vibration dampers.

The Z-5 is in service in civil fields such as electricity, agriculture, forestry and resource detection, in addition to military uses. It has a maximum take-off weight of 450 kg, a mission payload of 50-80 kg, a maximum cruising speed of 160 km/h, and flight endurance of 4-6 hr.

8月3日，总参谋部第六十研究所研制的Z-5型无人直升机开始在广东省进行电力巡检示范飞行作业。此次飞行共18架次，Z-5首次在国内搭载了Ku波段卫星通信系统，有效解决了超低空、山区飞行的通信瓶颈。Z-5型无人直升机是一款轻型多用途无人直升机，在2011年完成设计定型，随后在部队、院校及全军各训练基地进行了推广应用，并在电力、农业、林业和资源探测等民用领域成功实现了成果转化应用。
Thales: A Next-Gen Digital Cockpit

Imagine a helicopter that nearly flies itself, leaving the crew free to concentrate on the mission at hand. Avionics, connected seamlessly to the rest of the world through secure datalinks, make the aircraft a digital node on the Internet and display vital mission information.

Thales is here at China Heli Expo, Hall 1, Booth C510, to promote Avionics 2020 to Western and Chinese manufacturers.

Meanwhile, talks “are progressing quite well” with Shanghai AVIC on forming a partnership for helicopter avionics under a memorandum of understanding signed two years ago, says Guyonnet, “but there is no news today.”

Thales is promoting its Avionics 2020 digital cockpit here at the show. A Compact Autopilot

Until now automatic pilots were too heavy and too expensive, especially for light and medium helicopters, says Thales. But its new Compact Autopilot brings big-helicopter safety features to small aircraft whose SAR, EMS and law enforcement missions see them increasingly operating at low level and in adverse weather.

The Compact Autopilot system weight is reduced by not requiring a main Flight Control Computer. It provides stability augmentation, attitude retention and flight director modes such as altitude or heading hold and reduces the risk of aircraft incidents.

A Compact Autopilot

泰雷兹：新一代数字驾驶舱系统

泰雷兹与位于上海的中国航空无线电电子研究所在两年前签署的备忘录，双方就联合开发直升机航电设备而建立伙伴关系进展顺利。

目前，直升机的自动驾驶系统都很贵，而且重量大，特别是对中型直升机来说影响更大。而泰雷兹表示，其新型紧凑型自动驾驶仪为小型直升机提供与大型直升机相当的安全功能，特别是在恶劣天气下小型直升机的运行水平越来越差的情况下。

这款紧凑型自动驾驶仪取消了主飞控计算机，从而减少了自动驾驶仪系统的重量，它可以增强飞行稳定性、保持飞行姿态，如保持飞行高度或航向并降低飞行事故的风险。
Safran Helicopter Engines Builds China Momentum
赛峰直升机发动机在华表现强势

The next development will be certification at the end of 2018 of the joint-venture 1,700 shp WZ16 engine in the 7-ton AC352 helicopter.

“We have been working for more than 40 years with the Chinese helicopter industry,” says Hervé Pasbecq, General Manager of Safran Engines China, with increasing levels of cooperation. Safran powers the single-engine Avicopter AC311/311A helicopters, and the twin-engine Harbin Z-9/H410/H425/AC312A and the updated AC312E. That series owes its origins to the Aerospatiale Dauphin built under license by Hafei since 1981.

“We have some other projects as well,” says Pasbecq, but he would not disclose details. Avicopter has yet to announce engine selections for its highly-modified AC312C program, based on the AC312A, and the under-development 3-ton-class AC322 for which Safran is proposing the Arrius 2.

Until five years ago the majority of Turbomeca’s engines in China were licence-built by Chinese partners, but now more Western-built Safran engines are entering service in imported helicopters. Consequently in 2013 Turbomeca opened a maintenance center in Tianjin for Arriel 2, Arrius 2 and Maquila 1 and 2 engines to supplement the overhaul facilities of its Chinese partners.

Safran is also gearing up to support deliveries into China of the new single-engine Bell 505 JetRanger X from the beginning of 2018. That helicopter is powered by a U.S.-built Safran Arriel 2R turboshaft, and Bell has announced contracts with Chinese customers for more than 75 aircraft.

Safran Helicopter Engines is here in Hall 1, Booth C507.

—John Morris

Avicopter’s AC312E is powered by two Safran Helicopter Engines Arriel 2H turboshafts.
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First Two New K-Max for China
两架新K-Max直升机来到中国

The world’s only dedicated single-seat, medium lift helicopter is back in production after a 10-year lapse, and the first two are going to China.

Kaman Aerosystems’ K-Max Aerial Truck helicopters will be used to fight fires by Guangdong Juxiang General Aviation Company. They were purchased by Lectern Aviation Supplies Co., of Hong Kong, which will obtain approval for the type from the Civil Aviation Authority of China (CAAC).

Helicopter legend Charles Kaman designed the K-Max in the 1990s, using his patented counter-rotating, intermeshing-rotor design for an aircraft optimized to haul cargo back and forth as efficiently as possible with just one engine and a minimized, single-seat fuselage. About 35 were built before production ceased in 2003, and 21 are still in service around the world. The new production run of 10 K-Max’s is valued between $75-85 million, the company says. All have been sold to customers in the U.S. and Europe, in addition to the two for China, and more could be produced if there is enough demand.

The K-Max can lift up to three tons (2,722 kg) externally at lower altitudes and 5,000 lb (2,268 kg) at 8,000 ft altitude (2,446 m). It is designed for up to 30 trips an hour, whereas most helicopters can manage only one or two cycles in that time.

In 2010, Kaman teamed with Lockheed Martin on a $45.8 million contract to use two unmanned K-Max helicopters in Afghanistan to deliver supplies to the U.S. Marine Corps. Over 33 months they hauled 4.5 million pounds (2.04 million kg) of cargo, demonstrating their capability to keep operating reliably in harsh, hot- and high conditions.

The K-MAX fleet has accumulated more than 340,000 flight hours since FAA certification in 1994.

—John Morris

世界上唯一的一座、中型起载直升机在停产10年后恢复生产，最初的两架来到了中国。

广东九祥通用航空公司采用卡曼航空系统的K-Max直升机用于消防救援，它们由香港Lectern航空器材有限公司购买，并将获得中国民航局（CAAC）的批准。

直升机传奇查尔斯·卡曼（Charles Kaman）在20世纪90年代设计了K-Max，使用反向啮合双旋翼设计的专利优化了飞机，使其只凭一台发动机和最小化的单座机身来尽可能高效地运送货物。K-Max在2003年停产前生产了约35架，目前全球仍有21架正在服役。10架新生产的K-Max运营价值在7500-8500万美元之间，除了中国的两架外其余的都被卖给了美国和欧洲的客户，如果有足够的需求，还可以生产更多的产品。

K-Max可以在低海拔吊运约3吨重的物品，在2446米的高度吊运2268kg的物品，它每小时可以完成多达30次起吊，而多数直升机只能在相同时间内完成一到两次。

Simplex Adds Cannon to AC313 Firefighter

Simplex公司为AC313提供消防水炮

Simplex Aerospace has turned the AC313 into a firefighter with a punch with the addition of a powerful water cannon that can target flames in hard-to-reach places such as high-rise buildings.

The U.S.-based company had earlier developed a firefighting tank and water-drop system for the AC313, and has delivered eleven to customers in China. It believes the systems are the first developed for a Chinese-manufactured helicopter.

The Model 380A Fire Attack tank for the AC313 holds some 4,000 liters (1,050 U.S. gals). It features a retractable hover pump similar to that on the Sikorsky Firehawk and the Airbus Helicopters EC225.

The first Model 580 SkyCannon delivered into China is being demonstrated here at the show on an AC313. The 7.3-meter-long boom can shoot up to 40 meters, and is controlled by an operator in the main cabin. It can fire a constant water jet for up to 6.5 minutes with the Model 380A tank.

Other features include a camera system integrated into the AC313’s multifunction displays instead of using external cargo mirrors, providing enhanced visibility and situation awareness for hover pump and door operations. The tank also incorporates data recording, level sensors and an advanced door system for wheeled helicopters. It can be filled with either water or foam and retardants.

Simplex, which is exhibiting here in Hall 1, Booth D703, also makes firefighting and water cannon systems for Western- and Russian-made helicopters, as well as agricultural spray systems.

—John Morris

Simplex公司已将AC313直升机武装成了一名空中消防员。为其安装了一个功率强大的水炮，它可以瞄准常规消防水枪难以到达的地方，诸如高层建筑。

Simplex早前为AC313开发了消防用水箱和投水系统，并已向中国客户提供了11套设备，这是首款为中国造直升机开发的消防灭火系统。

AC313所采用的380A型灭火水箱可以携带约4000升水，它具有与西科斯基S-70A“灭火鹰”（Firehawk）和空客直升机H225类似的水泉。

首套装备AC313的580型SkyCannon水炮，水管长达7.3m，喷水射程高达40m，搭配380A型水箱可连续喷水6.5分钟。

该消防套件的其他功能包括整合到AC313驾驶舱显示器中的相机系统，它可以使用直升机不必使用外部货物，提高了直升机悬停时操作灭火和投水舱门的可见性和态势感知力，水箱中还包含有数据记录器、液位传感器等设备，可以携带水或泡沫阻燃剂。

除中国直升机以外，该公司也为西方和俄制直升机提供消防水箱和水炮系统，此外还可以提供农业喷雾系统。“
Asian Sky Releases Survey of GA in China
亚翔航空发布《中国通航调查报告》

Have you ever wondered how many general aviation aircraft there are in China? The answer has remained elusive until now due to the country’s vast size and difficulty in accessing reliable information.

But now Hong Kong aviation services specialist and consultant Asia Sky Group has counted them all. Applying the expertise it has gained with its regular business jet and helicopter surveys that cover Asia as well as China, and insights from sister companies that include Avion Pacific, which buys and sells helicopters and GA aircraft in China and throughout the region, it has compiled its first “China GA Report.”

It’s available here at the show—in Chinese only—at Asian Sky Group, Hall 2, Booth A803. Or for download at www.asianskygroup.com/media-reports

For those of you who would like to see the report in English, you must wait until the National Business Aviation Association convention in Las Vegas next month, where it will be released with fanfare. Or just read on here for a sneak preview of the highlights.

The survey is remarkable in that it doesn’t just list aircraft totals by manufacturer and type (business jets, helicopters, turbine utility and piston-engine aircraft), it also tells you where they are and who operates them. It delves into China’s policy to boost GA by elevating it to a separate industry, and how it will play a major role in economic development. The report tells how there will be over 700 GA airports by 2020, and how development of aerospace industrial parks around them could lead to a production overcapacity that will, ironically, stifle growth.

And it explains why the much-talked-about pilot shortage will hit GA harder than the airlines (who wants a low-paid job as a GA flight instructor?), perhaps adding another damper to the unbridled growth in the first half of 2017 has been a mere 3%. But this growth exceeded 20% in 2013. And it reported an approximately 15% increase in 2016.

As of 2016 year end there were 2,595 aircraft in the Mainland China GA fleet. Fixed-wing totaled 1,809, including 329 business jets, 252 turboprop and 1,228 piston and electric aircraft.

The rotorcraft fleet is 57% turbine with 514 helicopters, followed by 363 piston-engine helicopters and 20 gyroplanes.

While the industry talks of growth rates by the turbine helicopter fleet over the last several years in the order of 20%, growth in the first half of 2017 has been a mere 3%. But this is counting deliveries rather than orders, and subtracts those helicopters that have been sold out of the country.

Airbus’ light-single H125 is the most popular turbine type in China, with 88 in service representing 17% of the total fleet, the report says.

—John Morris
MA700 is entering final design.

The C919 is coming together.

The ambitious move, if confirmed, is expected to see China's aviation industry expanding significantly with new production facilities.