

# SIKORSKY TRAINING ACADEMY





#### TRAINING YOU CAN TRUST

The Sikorsky Training Academy (STA) is pleased to offer a full range of comprehensive solutions for your training requirements. From standard courses to individualized customer training programs, our team will work closely with you to ensure full mission readiness.

Located on Martin County Airport, Witham Field in Stuart Florida, STA is just north of Sikorsky's West Palm Beach Facility. Our Academy operational facility spans more than 35,000 square feet.

We understand the strict requirements of developing a new work force and the long-range outlook necessary to support aviation operations. STA can offer formal maintenance and pilot programs for both students new to aviation and those experienced personnel transitioning from other platforms.

Our pilot training program ensures new students thoroughly understand systems and procedures in their specific aircraft. Pilots train in flight simulators and fully operational aircraft to prepare them for more advanced Black Hawk mission training.

#### Safety First...Always

Our pilots, maintainers, and instructors know the aircraft and have extensive experience in their performance, along with a direct line to the Sikorsky engineering department for questions and needs.

STA has the capability to develop your maintenance staff into a highly skilled maintenance teams able to perform in the most demanding environments. Performance-based training focuses on demonstrating both proficiency and skill.

The Sikorsky Training Academy is an OEM facility that offers both an advanced training range and a Night Vision Goggle (NVG) isolated area.

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#### **GENERAL STUDENT INFORMATION**

#### LANGUAGE REQUIREMENTS

#### PILOT TRAINING

Training courses are conducted in the English language, and all written material will be delivered in English. It is required that pilots be able to read, write and communicate in English to International Civil Aviation Organization (ICAO) level 4 English language proficiency standards in order to meet the FAA verification process.

Pilots and crewmembers must have a good safety record and current unrestricted flight medical certificate. All flight documents must be presented in English or translated for review to ensure approvals are in place prior to training.

#### MAINTENANCE TRAINING

Excellent comprehension skills and command of the English language is necessary. This requires the student to have the ability to write and communicate in English to an International Civil Aviation Organization (ICAO) level 4 English language proficiency standard.

#### **COMPLETION STANDARDS**

#### FLIGHT COURSES

Successful completion is dependent on the student attending a minimum of 95% of all course sessions. A performance-based flight evaluation will be administered by a Sikorsky qualified flight instructor prior to course completion, in which the individual must demonstrate proficiency. Upon successful completion of the flight training, Sikorsky will submit a Certification of Completion to the pilot or crewmember.

#### MAINTENANCE COURSES

Successful completion is dependent on the student attending a minimum of 90% of all course sessions. Students will participate as directed in all practical and academic exercises and complete all examinations with a minimum score of 70%. Upon successful completion of the maintenance training, Sikorsky will submit a Certification of Completion to the technician.

#### ALLOWABLE TRAINING

All training will be conducted in accordance with current U.S. State Department approvals and provisos. Accordingly, training will be limited to aircraft, subsystem operation, and maintenance. Doctrines and mission tactics will be included in the instruction.

#### PROPRIETARY INFORMATION

Sikorsky does not permit audio or video recordings of training courses or technical data by any customer. Training syllabi and curriculum documents are considered Sikorsky proprietary information and as such are not for replication or reissue.

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#### PILOT INITIAL QUALIFICATION COURSE

#### **COURSE DESCRIPTION**

The Black Hawk Pilot Initial Qualification Course is intended for current qualified commercial helicopter pilots with instrument rating, or military equivalent, with no prior Black Hawk helicopter qualifications.

Phase 1 provides ground school academics and full flight simulation training over 19 days.

#### This phase covers the following topics:

- General Aircraft Overview
- Publications
- Crew Resource Management
- Adverse Weather Operations
- Electrical Power System
- Powerplant and Related Systems
- Fire Protection Systems
- Fuel System
- Hydraulic Systems
- Landing Gear and Brakes
- Powertrain
- · Automatic Flight Control System
- Main Rotor/Tail Rotor
- Active Vibration Control System
- Flight Management System
- Integrated Cockpit
- Performance Planning

Phase 2 provides flight training over 10 days.

#### This phase covers the following topics:

- Flight Preparations
- Preflight Procedures
- Takeoff and Departure
- Inflight Maneuvers
- Landings and Approaches to Landings
- Flight Director Procedures
- Emergency Procedures
- Post Flight Procedures

#### **COURSE LENGTH**

The combined duration of training for both phases is 29 days, or 6 weeks, in length. This will include 10 hours of Systems Integration training conducted on a Ground Flight Simulator, in addition to 20 hours Pilot in Command simulator time and 10 hours of Second in Command aircraft time.

- Possess a current commercial helicopter certificate with instrument rating or military equivalent for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Additional requirements as listed in General Student Information.









#### **BLACK HAWK PILOT TRANSITION COURSE**

#### **COURSE DESCRIPTION**

The Black Hawk Pilot Transition Course will train previously qualified legacy S-70 or H-60 helicopterpilots in the latest generation of the Black Hawk Helicopter.

Phase 1 covers ground school academics as well as full-flight simulation training over 10 days. The ground school will focus on the systems that are different from legacy models.

#### This phase covers the following topics:

- General Aircraft Overview
- Publications
- Crew Resource Management
- Adverse Weather Operations
- Electrical Power System
- Powerplant and Related Systems
- Fire Protection Systems
- Fuel System
- Hydraulic Systems
- Landing Gear and Brakes
- Powertrain
- Automatic Flight Control System
- Main Rotor/Tail Rotor
- Active Vibration Control System
- Flight Management System
- Integrated Cockpit
- Performance Planning

Phase 2 covers aircraft flight training over 10 days.

#### This phase covers the following topics:

- Flight Preparations
- Preflight Procedures
- Takeoff and Departure
- Inflight Maneuvers
- Landings and Approaches to Landings
- Flight Director Procedures
- Emergency Procedures
- Post Flight Procedures

#### **COURSE LENGTH**

The combined duration of training for both phases is 20 days, or 4 weeks, in length. This will include 7 hours of Systems Integration training conducted on a Ground Flight Simulator, in addition to 10 hours Pilot in Command simulator time, and 10 hours of Second in Command aircraft time

- Possess a current commercial helicopter certificate with instrument rating, or military equivalent for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Be previously qualified in S-70 or H-60 rotorcraft.
- Additional requirements as listed in General Student Information.









#### MAINTENANCE TEST PILOT FAMILIARIZATION TRAINING COURSE

#### **COURSE DESCRIPTION**

A Maintenance Test Pilot (MTP) must possess a thorough understanding of the systems, knowledge of the maintenance test flight manual, functional checks, and the ability to communicate effectively as a crewmember.

The Black Hawk Maintenance Test Pilot Familiarization Training Course provides the pilot with the knowledge and proficiency to perform post-maintenance operational checks required to return an aircraft to flyable status.

This training focuses on determining the aircraft airworthiness, utilizing proven techniques in order to determine whether the airframe, powerplant, accessories, and other equipment are functioning in accordance with predetermined requirements.

This course will be conducted in the aircraft and covers the following topics:

- Maintenance Test Flight Preparations
- Preflight Procedures
- Before Starting Engine Checks
- · Starting Engine Checks
- Run-Up Checks
- Taxi Checks
- Before Takeoff/Hover Checks
- After Takeoff/Cruise Checks
- After Landing Checks
- Maintenance Test Flight Checks

#### **COURSE LENGTH**

The duration of training is 10 days, or 2 weeks, in length. This will include 10 hours of Second in Command aircraft time.

- Possess a current commercial helicopter certificate with instrument rating or military equivalent for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Within the last six months, have 30 hours in type, 20 hours as Pilot in Command in type and 20 hours in specific model.
- Pilots who are not previously qualified in the latest generation S-70 or H-60 rotorcraft must complete the Pilot Initial Qualification Course. Pilots who are previously qualified in a legacy S-70 or H-60 rotorcraft must complete the Pilot Transition Course (academics and flight simulator).
- Additional requirements as listed in General Student Information.









#### MAINTENANCE TEST PILOT DIFFERENCES COURSE

#### **COURSE DESCRIPTION**

The Black Hawk Maintenance Test Pilot Differences Course will train previously qualified legacy S-70 or H-60 Maintenance Test Pilots in the newest generation of the Black Hawk. This course focuses on the differences from the legacy aircraft to the newest generation of Black Hawk.

This course will be conducted in the aircraft and covers the following topics:

- Maintenance Test Flight Preparations
- Preflight Procedures
- Before Starting Engine Checks
- Starting Engine Checks
- Run-Up Checks
- Taxi Checks
- Before Takeoff/Hover Checks
- After Takeoff/Cruise Checks
- After Landing Checks
- Maintenance Test Flight Checks

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This will include 5 hours of Second in Command aircraft time.

- Possess a current commercial helicopter certificate with instrument rating or military equivalent for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Previously qualified as a maintenance test pilot in legacy models of the H-60 or S-70 rotorcraft.
- 1000 hours in legacy models of the H-60 or S-70 rotorcraft.
- Within the last six months, have 30 hours in type, 20 hours as Pilot in Command in type, and 20 hours in specific model.
- Additional requirements as listed in General Student Information









#### INSTRUCTOR PILOT FAMILIARIZATION COURSE

#### **COURSE DESCRIPTION**

The Black Hawk Instructor Pilot Familiarization Course trains instructor pilots on how to safely conduct training in the latest generation of the Black Hawk.

This course will be conducted in the aircraft and covers the following topics:

- Flight Preparations
- Preflight Procedures
- Takeoff and Departure
- Inflight Maneuvers
- · Landing and Approaches to Landing
- Flight Director Procedures
- Emergency Procedures
- Post Flight Procedures
- Methods of Instruction

This course does not fulfill the renewal of flight instructor certificate requirement under 14 CFR 61.197.

#### **COURSE LENGTH**

The duration of training is 10 days/2 weeks in length. This will include 10 hours of Second in Command aircraft time.

- Possess a previously qualified and current rotorcraft Certified Flight Instructor, or military Instructor Pilot, in helicopters by their cognizant military/government organization, for a turbine helicopter.
- Have a minimum of 1000 flight hours in turbine rotorcraft, of which 500 hours must be Pilot in Command time.
- Within the last six months, have 30 hours in type, 20 hours as Pilot in Command in type, and 20 hours in specific model.
- Pilots who are not previously qualified in the latest generation S-70 or H-60 must complete the Pilot Initial Qualification Course. Pilots who are previously qualified in legacy S-70 or H-60 aircraft, must complete the Black Hawk Pilot Transition Course (academics and flight simulator).
- Additional requirements as listed in General Student Information.









#### INSTRUCTOR PILOT REFRESHER COURSE

#### **COURSE DESCRIPTION**

An Instructor Pilot must stay sharp and current with their understanding of the aircraft systems, knowledge of flight maneuvers, and their ability to instruct while acting as an effective crewmember.

The Black Hawk Instructor Pilot Refresher Course trains previously qualified S-70 or H-60 Instructor Pilots by providing a review of systems and emergency procedures, as well as flight training and instructional techniques utilized when training organizational pilots.

This course is conducted in the aircraft with a focus on the Instructor Pilots abilities to provide instruction with an emphasis on Crew Resource Management.

#### This course will cover the following topics:

- Flight Preparations
- Preflight Procedures
- · Takeoff and Departure
- Inflight Maneuvers
- · Landing and Approaches to Landing
- Flight Director Procedures
- Emergency Procedures
- Post Flight Procedures
- Methods of Instruction

This course does not fulfill the renewal of flight instructor certificate requirement under 14 CFR 61.197

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This will include 5 hours of Second in Command aircraft time.

- Possess a previously qualified and current rotorcraft Certified Flight Instructor, or military Instructor Pilot, in helicopters by their cognizant military/government organization, for a turbine helicopter.
- Have a minimum of 1000 flight hours in turbine rotorcraft, of which 500 hours must be Pilot in Command time.
- Have 30 hours in type, 20 hours Pilot in Command in type, and 20 hours in specific model.
- Additional requirements as listed in General Student Information.









#### PILOT MISSION EQUIPMENT FAMILIARIZATION COURSE

#### **COURSE DESCRIPTION**

Each pilot must learn to operate the specific aircraft mission equipment installed in their aircraft while acting as an effective crewmember.

The Black Hawk Pilot Mission Equipment
Familiarization Course is organized to familiarize
pilots with their specific mission equipment. The
course provides the
necessary knowledge and proficiency to preflight
and operate that equipment.

Depending upon the customer aircraft configuration, the syllabus will need to be custom tailored and/or may include the following topics:

- Navigation and Flight Planning
- Search and Rescue Patterns
- External Load/Hoist
- Communications
- Integrated Vehicle Health Management System
- · Customer Specific Equipment

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This will include 5 hours of Second in Command aircraft time.

- Possess a current commercial helicopter certificate with instrument rating, or military equivalent for a turbine helicopter; and have a minimum of 500 flight hours in turbine rotorcraft.
- Have a minimum of 500 flight hours in turbine rotorcraft.
- Pilots who are not previously qualified in the latest generation S-70 or H-60 rotorcraft must complete the Pilot Initial Qualification Course.
- Additional requirements as listed in General Student Information.









#### RECURRENT / REFRESHER PILOT COURSE

#### **COURSE DESCRIPTION**

A pilot must stay sharp and current with their understanding of the aircraft systems, knowledge of flight maneuvers, and the ability to operate as an effective crewmember.

The Black Hawk Recurrent/Refresher Course targets pilots who have attended an Initial or Transition course and required to attend annual training or have not flown the aircraft for an extended period of time.

This course is conducted in the aircraft and covers the following topics:

- Flight Preparations
- Preflight Procedures
- Takeoff and Departure
- Inflight Maneuvers
- Landings and Approaches to Landings
- Flight Director Procedures
- · Emergency Procedures
- Post Flight Procedures

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This will include 5 hours of Second in Command aircraft time.

- Possess a current commercial helicopter certificate with instrument rating or military equivalent for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Additional requirements as listed in General Student Information.









#### NIGHT VISION GOGGLE INITIAL COURSE

#### COURSE DESCRIPTION

The Black Hawk Night Vision Goggle Initial Course is intended for aircrew members with no prior Night Vision Goggle qualification. This course provides pilots and/or crewmembers with relevant and in-depth instruction on the characteristics of utilizing NVGs in-flight. The course includes classroom instruction and practical exercises as well as in-flight training and evaluations.

#### This course will cover the following topics:

- NVG Equipment
- Night Vision Orientation
- NVG Terrain Interpretation
- NVG Flight Planning
- NVG Operational Checks
- VMC NVG Takeoff
- Use of Search Light
- NVG Traffic Pattern
- NVG Approach and Landing
- Landing in Brightly Lighted Areas
- Remote Area of Operations
- Go Around (Wave Off)
- Airspace Surveillance
- Weather Interpretation
- NVG Before-Takeoff Checks
- Hovering Flight with NVGs
- Low Light Conditions
- NVG Deceleration
- Slope Operations

- Autorotation
- Single Engine Failure
- Recovery from Inadvertent Instrument Meteorological Conditions
- Respond to NVG Failure

#### COURSE LENGTH

The duration of training is 5 days, or 1 week, in length. Pilots and/or Crewmembers will receive 8 hours of Ground School and 5 hours of flight time.

- This course is available to pilots and crewmembers who are previously qualified and current in the latest generation S-70 or H-60 rotorcraft.
- Pilots must possess a current commercial helicopter certificate with instrument rating, or military equivalent, for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Additional requirements as listed in General Student Information.









#### NIGHT VISION GOGGLE REFRESHER COURSE

#### COURSE DESCRIPTION

The Black Hawk Night Vision Goggle Refresher Course is intended for aircrew members who are no longer current or need to improve proficiency operating NVGs. This course provides pilots and/or crewmembers with relevant and in-depth instruction on the characteristics of utilizing NVGs in-flight. The course includes classroom instruction and practical exercises as well as in-flight training and evaluations.

#### This course will cover the following topics:

- NVG Equipment
- Night Vision Orientation
- NVG Terrain Interpretation
- NVG Flight Planning
- NVG Operational Checks
- VMC NVG Takeoff
- · Use of Search Light
- NVG Traffic Pattern
- · NVG Approach and Landing
- Landing in Brightly Lighted Areas
- Remote Area of Operations
- Go Around (Wave Off)
- Airspace Surveillance
- Weather Interpretation
- NVG Before-Takeoff Checks
- Hovering Flight with NVGs
- Low Light Conditions
- NVG Deceleration
- Slope Operations

- Autorotation
- Single Engine Failure
- Recovery from Inadvertent Instrument Meteorological Conditions (IIMC)
- Respond to NVG Failure

#### COURSE LENGTH

The duration of training is 3 days in length. Pilots and/or Crewmembers will receive 8 hours of Ground School and 2.5 hours of flight time.

- This course is available to pilots and crewmembers who are previously qualified and current in the latest generation S-70 or H-60 rotorcraft
- Pilots must possess a current commercial helicopter certificate with instrument rating, or military equivalent, for a turbine helicopter and have a minimum of 500 flight hours in turbine rotorcraft.
- Additional requirements as listed in General Student Information.









#### AVIATION LIFE SUPPORT EQUIPMENT COURSE

#### COURSE DESCRIPTION

The Black Hawk Aviation Life Support Equipment Course provides technicians with the necessary knowledge and proficiency in order to perform fittings, adjustments, 0-Level repairs, and inspections of the required equipment for crewmember's safety.

This course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises.

#### This course will cover the following equipment:

- Crewmember Helmet
- Crewmember Survival Vest
- Survival Vest Mounted Equipment
- Crewmember Protection Equipment
- Aircraft Fire Bottles
- Miscellaneous Aircraft ALSE Furnishings

#### **COURSE LENGTH**

The duration of training is 10 days, or 2 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 45 hours of practical hand-on instruction. A tailored course, or the addition of students may add time, due to aircraft and instructor availability.

#### COURSE PREREQUISITES









#### **CREW CHIEF BASIC COURSE**

#### **COURSE DESCRIPTION**

The Black Hawk Crew Chief Basic Course is intended for technicians who are qualified on the S-70 or H-60 helicopter. The course is comprised of classroom instruction and evaluations, as well as systems integration through practical exercises and in-flight training. Technicians are provided with the necessary knowledge and proficiency to safely perform as crewmembers while operating under Visual Metrological Conditions.

#### This course will cover the following topics:

- Auxiliary Power Unit (APU) Operation
- · Operating Limitations and Restrictions
- Emergency Procedures and Malfunction Analysis
- Crew and Passenger Egress
- Aerospace Scan Techniques & Patterns
- Confined Area Landings
- Equipment and Environmental Training
- Crew Training Device Familiarization
- · Hover, Taxi, Take Off and Landings
- Scenario Development and Decision Making

# The following topics may be included as part of the Crew Chief Basic Course with additional training time:

- Helicopter Night Operations
- Aircraft Formation Flight
- Basic Night Vision Goggle Operations
- Low Level Flight
- Rescue Hoist Deployment and Use
- · Bambi Bucket Operations
- Customer Tailored Requirements

#### **COURSE LENGTH**

The duration of training is 18 days, or 4 weeks, in length. This course is designed for a maximum of 8 students and consists of a minimum of 8 flight hours. A tailored course, or the addition of students may add time, due to aircraft and instructor availability.

- Completion, or equivalency, of either the Black Hawk Airframe & Powerplant Maintenance Initial Course or the Black Hawk Avionics, Automatic Flight Control Systems & Electrical Maintenance Course.
- Possess a current FAA class 3 Flight Physical or equivalent.
- Additional requirements as listed in General Student Information.









#### CREW CHIEF BASIC COURSE WITH NIGHT VISION GOGGLES

#### **COURSE DESCRIPTION**

The Black Hawk Crew Chief Basic Course with Night Vision Goggles is intended for technicians who are qualified on the S-70 or H-60 helicopter. The course is comprised of classroom instruction and evaluations, as well as systems integration through practical exercises and in-flight training. During the course crewmembers will be introduced to, and utilize NVGs, for a minimum of 2 flight hours. Technicians are provided with the necessary knowledge and proficiency to safely perform as crewmembers while operating under Visual Metrological Conditions.

#### This course will cover the following topics:

- Auxiliary Power Unit (APU) Operation
- Operating Limitations and Restrictions
- Emergency Procedures and Malfunction Analysis
- Crew and Passenger Egress
- Aerospace Scan Techniques & Patterns
- Confined Area Landings
- Equipment and Environmental Training
- Crew Training Device Familiarization
- Basic Night Vision Goggle (NVG) Operations
- Hover, Taxi, Take Off and Landings
- Scenario Development and Decision Making
- Practical Exercises Crew Chief Base Task List

The following topics may be included as part of the Crew Chief Basic Course with Night Vision Goggles as additional training time:

- Helicopter Night Operations
- · Aircraft Formation Flight
- Low Level Flight
- Rescue Hoist Deployment and Use
- · Bambi Bucket operations
- Customer Tailored Requirements

#### COURSE LENGTH

The duration of training is 20 days, or 4 weeks, in length. This course is designed for a maximum of 8 students and consists of a minimum of 10 flight hours. A tailored course, or the addition of students may add time, due to aircraft and instructor availability.

- Completion, or equivalency, of either the Black Hawk Airframe & Powerplant Maintenance Initial Course or the Black Hawk Avionics, Automatic Flight Control Systems & and Electrical Maintenance Course.
- Possess a current FAA class 3 Flight Physical or equivalent.
- Additional requirements as listed in General Student Information.









#### CREW CHIEF BASIC MISSION EQUIPMENT COURSE

#### COURSE DESCRIPTION

The Black Hawk Crew Chief Basic Mission Equipment Course is intended for crewmembers who have been qualified on the S-70 or H-60 helicopter and provides qualified Black Hawk Crew Chiefs with a basic inflight operations knowledge of aircraft mission equipment systems. The course is comprised of classroom instruction and evaluations as well as systems integration through practical exercises and in-flight training. During the course crewmembers will refresh skills such as single and dual wheel landings, low and high hover operations, and external load operations.

Students will be introduced to the following specialized mission equipment per specific aircraft configuration:

- Rescue Hoist with Hoist Light
- Rescue Equipment
  - Stokes Litter System
  - Floating Metal Rescue Basket
  - MK III Rescue Seat
  - Rescue Strop
  - Rescue Net
- Fast Rope Insertion Extraction (FRIES) System
- External Load Operations
- 200 Gallon Internal Aux Tank

#### COURSE LENGTH

The duration of training is 5 days, or 1 week, in length. This course is designed for a maximum of 4 students and consists of a minimum of 6 flight hours.

- Completed the Crew Chief Basic Course or equivalent.
- Possess a current FAA class 3 Flight Physical or equivalent.
- Additional requirements as listed in General Student Information.









#### CREW CHIEF ADVANCED MISSION EQUIPMENT COURSE

#### COURSE DESCRIPTION

The Black Hawk Crew Chief Advanced Mission Equipment Course is intended for crewmembers who have been qualified on the S-70 or H-60 helicopter and provides qualified Black Hawk Crew Chiefs with with logical, in-depth, and relevant instruction on the inflight operations of advanced mission equipment systems. The course is comprised of classroom instruction and evaluations as well as systems integration through practical exercises and in-flight training.

# During the course crewmembers can be introduced to the following specialized mission equipment:

- · Rescue Hoist with Hoist Light
- Rescue Equipment
  - Stokes Litter System
  - Floating Metal Rescue Basket
  - MK III Rescue Seat
  - Rescue Strop
  - Rescue Net
- 200 Gallon Internal Aux Tank
- Crashworthy External Fuel System
- Triple Patient Litter System (TPLS)
- Helicopter Emergency Egress Lighting System (ADHEELS/HEELS)
- Loudhailer
- Universal Mobile Aircrew Restraint System (UMARS)
- Bambi Bucket
- Nightsun XP
- E0/IR FLIR Systems
- Weather Radar
- Maritime Surface Search Radar

#### **COURSE LENGTH**

The duration of training is 10 days, or 2 weeks, in length. This course is designed for a maximum of 4 students and consists of a minimum of 8 flight hours. This course must be trained on the customer's aircraft to ensure proper aircraft and equipment configuration.

- Completed the Crew Chief Basic Course or equivalent.
- Possess a current FAA class 3 Flight Physical or equivalent.
- Additional requirements as listed in General Student Information.









#### AIRCRAFT MAINTENANCE INITIAL COURSE

#### COURSE DESCRIPTION

The Black Hawk Aircraft Maintenance Initial Course provides technicians with the necessary knowledge and proficiency to determine whether the aircraft is functioning in accordance with predetermined requirements. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises. Technicians will perform removal and installation, adjustments, O-Level repairs, and inspections of the Black Hawk Helicopter's mechanical, structural, avionics, AFCS, and electrical systems.

#### This course will cover the following topics:

- General Aircraft Overview
- Aircraft Systems
- Powerplant Systems
- Transmission and Drivetrain Systems
- Fire Protection Systems
- Pneumatic Systems
- Hydraulic Systems
- Flight Controls
- Landing Gear Systems
- Avionics Systems
- Automatic Flight Control Systems
- Electrical System
- Weight and Balance
- Troubleshooting Procedures
- Maintenance Adjustments
- Integrated Vehicle Health Management System (IVHMS)

#### COURSE LENGTH

The duration of training is 35 days, or 7 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 100 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

#### **COURSE PREREQUISITES**









#### AIRFRAME & POWERPLANT MAINTENANCE INITIAL COURSE

#### **COURSE DESCRIPTION**

The Black Hawk Airframe & Powerplant Maintenance Initial Course provides technicians with the necessary knowledge and proficiency to determine whether the aircraft is functioning in accordance with pre-determined requirements. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises. Technicians will perform removal and installation, adjustments, O-Level repairs, and inspections of the Black Hawk Helicopter's airframe, hydraulic, drivetrain, landing gear and rotor systems.

#### This course will cover the following topics:

- General Aircraft Overview
- Aircraft Systems
- Powerplant Systems
- Transmission and Drivetrain Systems
- Fire Protection Systems
- Hydraulic Power Systems
- Flight Controls
- Landing Gear Systems
- General Rigging Procedures
- Corrosion Control
- Weight and Balance
- Integrated Vehicle Health Management System
- Common Mission Equipment
- Maintenance Adjustments

#### COURSE LENGTH

The duration of training is 20 days/4 weeks in length. This course is designed for a maximum of 10 students and consists of a minimum of 60 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

#### **COURSE PREREQUISITES**









# AVIONICS, AUTOMATIC FLIGHT CONTROL SYSTEMS & ELECTRICAL MAINTENANCE COURSE

#### **COURSE DESCRIPTION**

The Black Hawk Avionics, Automatic Flight Control Systems & Electrical Maintenance Course provides technicians with the necessary knowledge and proficiency to determine whether the aircraft is functioning in accordance with predetermined requirements. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises. Technicians will perform removal and installation, adjustments, O-Level repairs, and inspections of the Black Hawk Helicopter's avionics, Automatic Flight Control Systems (AFCS) and electrical systems.

#### This course will cover the following topics:

- General Aircraft Overview
- Aircraft Systems
- Avionics Systems
- Automatic Flight Control Systems
- Electrical System
- Corrosion Control
- Weight and Balance
- Integrated Vehicle Health Management System (IVHMS)
- Common Mission Equipment

#### **COURSE LENGTH**

The duration of training is 20 days, or 4 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 60 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

#### **COURSE PREREQUISITES**









#### S-70 AIRCRAFT MAINTENANCE DIFFERENCES COURSE

#### COURSE DESCRIPTION

The S-70 Aircraft Maintenance Differences Course provides technicians with the necessary knowledge required to transition from the legacy Black Hawk helicopter to the newest model. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises. Technicians will perform removal and installation, adjustments, O-Level repairs, and inspections of the Black Hawk Helicopter's mechanical, structural, avionics, AFCS, and electrical systems.

#### This course will cover the following topics:

- Aircraft Differences Overview
- Drivetrain System Upgrades
- Automatic Vibration Control System (AVCS)
- Trim Systems/Flight Controls
- Rotor Brake System
- Folding Stabilator
- Automatic Flight Control System (AFCS)
- Integrated Vehicle Health Management System (IVHMS)
- Electromagnetic Interference Protection

#### COURSE LENGTH

The duration of training is 15 days, or 3 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 18 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

- Maintenance technicians with legacy Black Hawk experience.
- Additional requirements as listed in General Student Information.









#### MAINTENANCE MANAGER COURSE

#### **COURSE DESCRIPTION**

The Black Hawk Maintenance Manager Course introduces Maintenance Supervisors to the management programs and tools used to track, monitor, and record maintenance activities associated with the Black Hawk helicopter. The course is intended for seasoned Maintenance Managers and technicians alike that are new to the Black Hawk. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises.

#### This course will cover the following topics:

- General Aircraft Overview
- Aircraft Systems
- · Maintenance Program, Management
- Maintenance Management Tools

#### COURSE LENGTH

The duration of training is 10 days, or 2 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 4 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

- A minimum of 2 years experience as an acting maintenance supervisor (preferred).
- A minimum of 5 years experience as a helicopter technician.
- Completed the Black Hawk Airframe & Powerplant Maintenance Initial Course, Avionics, Automatic Flight Control Systems & Electrical Maintenance Course or equivalent.
- Black Hawk Pilots meet the minimum requirement to attend this training course.
- Additional requirements as listed in General Student Information.









#### QUALITY ASSURANCE & INSPECTOR COURSE

#### COURSE DESCRIPTION

The Black Hawk Quality Assurance and Inspector Course trains inspectors to properly perform inspections and documentation requirements for maintenance on the Black Hawk helicopter. Additionally, the course introduces inspectors to quality assurance programs and management tools. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises.

#### This course will cover the following topics:

- Quality Control Program
- Preventative Maintenance Inspections
- Quality Control Responsibilities
- Technical Inspector Responsibilities
- Aircraft Logbook & Maintenance Documentation
- Sonic Tap Testing

#### COURSE LENGTH

The duration of training is 10 days, or 2 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 8 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

- Be certified technical inspectors or equivalent on rotary wing aircraft.
- A minimum of 5 years experience as a helicopter technician.
   and
- Completed either the Black Hawk Airframe & Powerplant Maintenance Initial Course, the Black Hawk Avionics, Automatic Flight Control Systems & Electrical Maintenance Course, or equivalent.
- Additional requirements as listed in General Student Information.









#### **BLACK HAWK COMPLETE RIG COURSE**

#### **COURSE DESCRIPTION**

The Black Hawk Complete Rig Course provides technicians with the necessary knowledge and proficiency to perform flight control and engine rigging procedures on the Black Hawk Helicopter. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises.

#### This course will cover the following topics:

- · Purpose & Requirements of Rigging
- General Rigging Procedures
- Rigging Kit and Protractors
- Rig Troubleshooting Procedures
- Main Rotor Complete Rig Procedure
- Main Rotor Rig Check Procedure
- Tail Rotor Complete Rig Procedure
- Tail Rotor Rig Check Procedure
- · Engine Rig Procedure

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This course is designed for a maximum of 10 students and consists of a minimum of 28 hours of practical exercises. A tailored course, or the addition of students may add time, due to aircraft and instructor availability.

- Completed the Black Hawk Airframe & Powerplant Maintenance Initial Course, or equivalent.
- Additional requirements as listed in General Student Information.









#### INTEGRATED VEHICLE HEALTH MANAGEMENT SYSTEM

#### COURSE DESCRIPTION

The Black Hawk Integrated Vehicle Health
Management System Course provides technicians
with the necessary knowledge and proficiency to
utilize the aircraft's on-board-system (OBS) and
lintegrated Vehicle Health Management System
(IVHMS) ground station. Technicians will perform
removal and installation, adjustments, and
inspections on the aircraft installed IVHMS
equipment. The course is comprised of classroom
instruction and evaluations, as well as hands-on
practical exercises

#### This course cover the following topics:

- Helicopter IVHMS
- IVHMS Ground Station Operation
- Data Retrieval
- Helicopter Diagnostics

#### COURSE LENGTH

The duration of training is 5 days, or 1 week, in length. This course is designed for a maximum of 10 students and consists of a minimum of 8 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

- Completed either the Black Hawk Airframe & Powerplant Maintenance Iniitial Course, the Black Hawk Avionics, Automatic Flight Control Systems & Electrical Maintenance Course, or equivalent.
- Additional requirements as listed in General Student Information.









#### BLACK HAWK MISSION EQUIPMENT MAINTENANCE COURSE

#### COURSE DESCRIPTION

The Black Hawk Mission Equipment Maintenance Course provides technicians with the necessary knowledge and proficiency to maintain the Black Hawk helicopter mission equipment components and systems. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises. Technicians will perform removal and installation, adjustments, O-Level repairs, and inspections of the Black Hawk's specialized mission equipment systems.

#### This course cover the following topics:

- Rescue Hoist
- Litter Systems
- Cargo Hook
- Bambi Bucket
- Internal Auxiliary Fuel System
- Crashworthy External Fuel System
- Fast Rope Insertion & Extraction System
- Weather Radar
- Stormscope
- Customer Specific Equipment

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This course is designed for a maximum of 10 students and consists of a minimum of 8 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

- Completed either the Black Hawk Airframe & Powerplant Maintenance Initial Course, the Black Hawk Avionics, Automatic Flight Control Systems & Electrical Maintenance Course or the Black Hawk Familiarization Course or equivalent.
- Additional requirements as listed in General Student Information.









#### S-70 PHASE MAINTENANCE INSPECTION COURSE

#### COURSE DESCRIPTION

The S-70 Phase Maintenance Inspection Course provides technicians with the necessary knowledge and proficiency to prepare for, manage and execute PMI 1 & 2 inspections. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises.

Classroom instruction will focus on the planning and preparation, as well as the management of the phase to ensure tasks are completed successfully and on time.

Technicians will perform removal and installation, adjustments, O-Level repairs, and inspections of the Black Hawk Helicopter's mechanical, structural, avionics, AFCS, and electrical systems.

#### This course will cover the following topics:

- PMI Manual Overview
- Phase Intervals
- Inspection Areas 1-6
- Phase Preparation
- Phase Management
- PMI 1 and PMI 2 Inspections
- Additional Calendar Inspections
- Post Phase Maintenance

#### **COURSE LENGTH**

The duration of training is 10 days, or 2 weeks, in length. This course is designed for a maximum of 10 students and consists of a minimum of 60 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

- Either the Black Hawk Airframe and Powerplant Maintenance Initial Course or the Black Hawk Avionics, Automatic Flight Control Systems & Electrical Maintenance Course, or equivalent.
- Additional requirements as listed in General Student Information.









#### BLACK HAWK O-LEVEL BLADE REPAIR COURSE

#### COURSE DESCRIPTION

The Black Hawk O-Level Blade Repair Course provides technicians with the necessary knowledge and proficiency to perform repairs on the main and tail rotor blades. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises. Technicians will perform removal and installation, O-Level repairs, and inspections of the Black Hawk Helicopter's rotor blades.

#### This course will cover the following topics:

- Main Rotor System Overview
- Main Rotor Blade Construction
- Main Rotor Blade Attachment
- Automatic Flight Control Systems
- Basic O-level NDI Inspections
- Types of Damage
- Damage Limitations
- Types of Repair

#### **COURSE LENGTH**

The duration of training is 5 days, or 1 week, in length. This course is designed for a maximum of 10 students and consists of a minimum of 34 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

#### COURSE PREREQUISITES









#### **BLACK HAWK FAMILIARIZATION COURSE**

#### COURSE DESCRIPTION

The Black Hawk Familiarization Course provides operators and/or technicians with an introductory knowledge of the Black Hawk Helicopter's mechanical, structural, avionics, AFCS, and electrical systems. The course is comprised of classroom instruction and evaluations, as well as hands-on practical exercises.

#### This course will cover the following topics:

- General Aircraft Overview
- Aircraft Systems
- Powerplant Systems
- Transmission and Drivetrain Systems
- Fire Protection Systems
- Hydraulic Power Systems
- Flight Controls
- Inspections

#### COURSE LENGTH

The duration of training is 5 days, or 1 week, in length. This course is designed for a maximum of 10 students and consists of a minimum of 2 hours of practical exercises. A tailored course or the addition of students may add time due to aircraft and instructor availability.

#### **COURSE PREREQUISITES**











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