

**Operations Manual Part D**

**Training Manual**

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COMMERCIAL IN CONFIDENCE

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# Description of Scope

## General

* + 1. The Operations Manual Part D - **Training** - is in accordance with the Israeli Flight law and its regulations mainly A/C Operation & Flight Regulations, Licenses for Aircrew personnel, Aviation Licensing and Training Organizations.
    2. The Training Manual is approved by CAAI, and any amendment requires prior approval from the CAAI especially training programs and syllabi for every type rating.
    3. CAAI may make its own changes to the training programs. The company will apply these changes after receiving notification from CAAI.
    4. The Training Manual deals primarily with the operator type rating training, conversion training and checking programs for all personnel assigned to operational duties in connection with the preparation and/or conduct of a Commercial Air Transport (CAT) flight, as required by the Air Operations Regulation.
    5. The Training Manual is for the use of those Company personnel who have been appointed to carry out training and/or checking duties in respect of aircrew. The Company will ensure that full access to the Training Manual is provided for trainers and trainees as well as for the authorities.
    6. Each training program includes ground training and aerial training when needed.
    7. The operator shall provide adequate facilities, instructors, and materials for the training program.
    8. The operator conversion course and type rating course are supported by:
       1. This Operations Manual. (A-D)
       2. Israeli Flight Law and its Regulations.
       3. Type Conversion syllabus.
       4. Aircraft Flight Manual.
       5. Operator Conversion Supplements and Briefings which are not part of this manual.

## Definitions

Throughout this manual the following definitions and editorial practices shall apply:

* + 1. “Aircrew Regulation” Israeli Flight law and its regulations mainly A/C Operation & Flight Regulations, Licenses for Aircrew personnel, Aviation Licensing and Training Organizations.
    2. “Applicant” is used to indicate a person who is seeking the issue or renewal of a pilot’s license or rating.
    3. “Assessment of Competence” is a demonstration of skill and knowledge for the initial or recurrent issue of an instructor or check airman certificate.
    4. “Check airman” is used to indicate a person who is authorized by the Competent Authority to conduct the appropriate test or check.
    5. “Check” is a demonstration of proficiency for renewal or revalidation of a rating and the initial or subsequent issue of a Company Check.
    6. “Competent Authority” means the CAAI
    7. “May” is used to indicate discretion.
    8. “Pilot Flying” - Pilot responsible for all of the activities that directly effect flight path management, he or she flies the aircraft during takeoffs and landings and operates the autopilot during the flight.
    9. “Pilot Monitoring” – Pilot that monitors the course of the flight, fuel, any checklist and manages communications with crew/passengers in the cabin.
    10. “Renewal” implies renewal of an expired check.
    11. “Revalidation” implies renewal of a check within the validity period.
    12. “Shall”, “Must” and “Will” are used to indicate a mandatory requirement.
    13. “Should” and “Expect” are used to indicate strong obligation. The Training Standards Manager must approve any deviation from policy covered by this category.
    14. “Test” is a demonstration of skill for the initial issue of a license or rating.
    15. Conducting any proficiency skill check or ground training +/- 30 days with respect to due date- shall be considered as conducted on due date.
    16. “Initial training” - Training required of crew members who have not been certified or served in the same position on an aircraft.
    17. “Conversion training” - The training required of crew members who have been certified and served in the same position on another aircraft.
    18. “differences training” - The training required of crew members who have been certified and served on a particular model aircraft, and in the opinion of CAAI, the same training is required before the commencement of service of a crew member in the same position on the same aircraft in which changes have been made.
    19. "Re-training" - the training required of crew members to maintain their competence with respect to any aircraft, crew member position and type of operation in which the crew member serves.

## Amendment and Revision

* + 1. Amendments will be conducted in accordance with Part A chapter 0.2.
    2. Details of revisions which may be urgently required in the interests of flight safety, or which are supplementary to the Training Manual, will be distributed to aircrew as “Read & Sign” Those of long-term application will be incorporated into the Manual when it is next amended, or within 6 months of the effective date, whichever is the sooner.

## Approved Training Sites

* + 1. The company holds appropriate briefing room at its premises located in Tel Aviv
    2. All class briefings, conversing and type briefings, renewal training and annual training to be conducted in the above-mentioned briefing room, or any compatible training room that includes the elements listed in section d below.
    3. Type and annual proficiency checks may be conducted at any licensed aerodrome with adequate facilities, i.e. a quiet room with air-condition, and needed training aids
    4. The briefing room suitably equipped with:
       1. White board
       2. Computer.
       3. Projector with adequate screen.
       4. Air-condition.
       5. Any required training aids such as charts, etc’
    5. Pre-flight and post flights briefs can take place at any approved location where the aircraft departs from or lands. Can be conducted near or at the aircraft.
    6. The Company may decide that part of the training can be conducted in a simulator facility which is an approved one by CAAI.

## Reference Materials

* + 1. During all training, conversions or annual training the trainers and trainees will use the following reference materials:
       1. Flight Manual
       2. Operation Manual – Parts A-D
       3. AIP
       4. Flight Law and its Regulations.
       5. Aeronautical charts.
       6. SOP & EOP check lists.
       7. C&G and Apps for weather, NOTAM, W&B calculations, etc’.
       8. Dedicated presentations if available.

## Initiation of a Training Program

* + 1. Training program will be operated regularly by the company.
    2. Part of the training programs requires prior approval from CAAI:
       1. Type Rating Training.
       2. Check airman Training.
    3. Integration of a new pilot in the company.
    4. The company will advise CAAI 1 week in advance prior to commencing of any of the above-mentioned training programs.
    5. Type rating proficiency check to be conducted by CAAI examiner.

## Minimum Qualifications and Experience for Integration of a New Pilot to The Company.

* + 1. Minimum qualifications and experience are as follows:
       1. Israeli CPL – commercial pilot license
       2. At least 1000 FHs,
       3. At least 700 HRs on Helicopters.
       4. At least 500 HRs as PIC (pilot in command).
       5. Among them 100 as long-distance flights, (more than 100km)
       6. NCVFR rating. 25 FHs at night.
       7. Current medical certification.
       8. Not less than insurance requirements
       9. English proficiency (Level 4 min)

## Trainers And Check Airman

* + 1. Trainers in the company are certified instructors
    2. Check airman are certified by the CAAI.
    3. All training programs to be conducted by certified instructors or check airman.
    4. Differences training to be conducted by flight instructor.
    5. Familiarization training to be conducted by flight instructor or check airman
    6. Annual proficiency check and route checks to be conducted by check airman
    7. Annual route and aerodromes qualification check to be conducted by check airman
    8. Certifying of company instructors and check airman is detailed in Part D chapter 2.4

## Completion Of Training Program

* + 1. Completion of all training program syllabus. (theoretical and practical).
    2. All training programs include an assessment after completion of the theoretical part and the practical part (if applicable).
    3. Theoretical assessment can be done in written form or verbal.
    4. Practical assessment will be done during flight.
    5. Passing score – 80.
    6. Practical assessment – requirements are detailed in the check form.

## Record Of Training

* + 1. Instructor/Check airman will verify with his signature the completion of each part of the training, i.e. each lecture or flight.
    2. Instructor/Check airman will verify with his signature each skills qualification test.
    3. Record of training completion for each trainee will be kept in the trainee personal file.
    4. Records can be kept electronically.
    5. Daily inspection certification will be issued by the approved maintenance organization.

## Safety Emphasizes

* + 1. **THE BASIS FOR SAFETY IS PROFESSIONALISM**.
    2. Professionalism means operating in accordance with this flight manual, Flight Law and its Regulations, A/C flight manual.
    3. No deviation or exceeding from 1.11.a above is allowed.
    4. All training programs shall be conducted as detailed in Part D.
    5. Any deviation from approved training programs in Part D is prohibited.
    6. Instructor shall demonstrate each drill or emergency procedure before execution by the applicant.
    7. Safety emphasizes briefing is mandatory in each flight briefing and within the flight as part of crew duties.
    8. Risk assessment is mandatory before each flight.
    9. Any deviation from regulations or exceeding of A/C limitations to be reported to chief pilot immediately.
    10. Dual controls to be installed in each training flight, company certified flight instructor or check airman shall occupy the left seat during type rating proficiency check unless CAAI examiner is certified to the specific type

## Use of Flight Simulation Training Devices (FSTD)

* + 1. Prior to any FSTD training the company should get CAAI approval for the FSTD, training program, instructors and Check-airmen
    2. The use of FSTD’s will be limited to the approvals granted by CAAI, particularly in terms of the elements of training and testing or checking that are not permitted. Prior to any approved training, testing or checking the company must ensure that the FSTD certificate is valid and approved by CAAI.
    3. FSTD is mainly used for emergencies that can’t be simulated during flight, such as fixed pitch, ditching, 2 hydraulic systems failure, fire, etc’.
    4. The crew will act as in a real flight, i.e., preflight and post flight briefs, performing all action as required including shutting off engines.
    5. Except when using the simulator as a teaching tool to examine and understand failure modes in slow time or under different conditions, ensure that the same SOP that would be used in the real aircraft are applied to avoid developing simulator habits which may be inadvertently taken into the aircraft. Maneuvers that would not normally be flown in the aircraft should not be practiced in the simulator except where required as part of the approved training and checking program.

## Differences Training

* + 1. Difference training is required under the licensing rules before operating variants within a helicopter type group. This difference training must be certified and recorded in the pilot’s log book.
    2. Operational difference training may also be required when the company introduces a significant change of equipment and/or procedures on types or variants currently operated that require the acquisition of additional knowledge and training on an appropriate training device or the aircraft. This may be combined with the licensing variant differences course if required.

## Familiarization Training

* + 1. Familiarization training may be required with regard to the differences in the helicopter's structure and systems, before operating aircraft within a type group that require only the acquisition of additional knowledge.
    2. Operational Familiarization training may also be required when the company introduces a change of equipment and/or procedures on types or variants currently operated that require the acquisition of additional knowledge. This may be combined with the licensing Familiarization training if required.

## Differences or Familiarization Knowledge Check

* + 1. On completion of differences or Familiarization training all crew will be checked on their knowledge by a written or oral exam. The pass mark will be 80% (For written exam - 80% of the answers should be correct. For oral exam – instructor will evaluate the level of knowledge if 80% or more/less)

## Training for Aircraft Systems and Navigation Aids Which Are Not Covered by Type Rating Training

* + 1. Where optional or role specific equipment is fitted which is not covered by the type rating training plan, training and checking for the equipment shall be established and included in the operator conversion training course.

## Training, Checks and Recency Periods Validity

* + 1. Annual Proficiency Check (PC)
       1. The Annual proficiency check comprises separate checks for the VFR type rating and aviation knowledge skills. The test should take place once every 12 calendar months and it’s theoretical part can be taken in written or orally.
       2. The VFR type rating PC is valid for 12 months in addition to the remainder of the month of issue.
       3. Assessment criteria are within the skill test form.
       4. Refer to Part D chapter 4.1 – Annual proficiency check FORM.
       5. CAAI or Check-airman will approve the pilot’s flight and knowledge qualification. Record of the flight shall be kept in the pilot’s file in the company’s records.
       6. If a pilot fails to conduct certain maneuver- the check airman can train him and let him conduct the maneuver once again as well as any other drill at his discretion. In order to prove his abilities, the pilot must demonstrate to the examiner complete control of the aircraft while demonstrating a successful result of performing any process or exercise. A pilot will not be employed by the company if he did not pass the test, until he completes the test successfully.

* + 1. Route/Area and Aerodrome Knowledge Qualification
       1. The period of validity of the route/area and aerodrome knowledge qualification shall be 12 calendar months in addition to the remainder of the month of issue. The test will be performed with CAAI examiner or company Check-airman and will include at least normal typical flight of the company and will include takeoffs and landings official aerodrome or aerodromes, as well as “shetach haf’ala” according to regulation 79b.
       2. Route/area and aerodrome knowledge shall be revalidated by operating on the route or area or to the aerodrome within a 12 month period.
       3. Assessment criteria are within the skill test form.
       4. Refer to Part D chapter 4.2 – Route/Area qualifications check FORM.

* + - 1. Recent Flight Experience
         1. A check flight conducted to satisfy one of the recent experience requirements may be counted towards the other recent experience requirements where their conditions of conduct match.
      2. Route Check flight and Annual Check-ride will be performed on separate flights (will not be performed on the same flight).
      3. Pilots shall record recency and check flights in their logbooks. Pilots and the Operation manager are responsible for monitoring their recency on each type flown. Pilots shall inform their Chief Pilot and Operations Staff when they no longer meet the requirements specified below. Although Chief Pilots, Crew Schedulers and Operations Staff may oversee the recency status of their base pilots, the final responsibility for determining whether they are qualified to operate a commercial air transport flight rests with the pilot.
      4. A pilot shall not operate a helicopter in commercial air transport or carrying passengers:
         1. As PIC or co-pilot unless he has carried out, in the preceding 90 days, at least 3 take-offs, approaches and landings in a helicopter.
         2. As PIC at night , with or without NVG (Between Sunset and Sunrise) unless he has carried out in the preceding 90 days at least 3 take-offs, approaches and landings at night as pilot flying in an aircraft of the same type or class. This covers the experience of day time as mentioned in par 1 above.
         3. Where a pilot is qualified on more than one type the 3 take-offs, approaches and landings required in paragraph c.1 or c.2 may be performed on one type.

## Recent Flight Experience - Summary Table

|  | **Time Period** | | | |
| --- | --- | --- | --- | --- |
| **Mission** | **3 months** | **6 months** | **12 months** | **24 months** |
| **Night**  **CAT**  **Flight Law** | **Self training of traffic circuits** | **Self training of traffic circuits** | **1st Night flight with instructor + annual skill test** | **1st Night flight with instructor + annual skill test** |
| **Minimum Requirement** | **3 take-offs & landing in preceding 90 days- at NIGHT** | **3 take-offs & landing in preceding 90 days- at NIGHT** | **3 take-offs & landing in preceding 90 days- at NIGHT** | **6 night flights of at least 1 Hr in preceding 24 months** |
| **Night**  **CAT**  **NVG** | **Self training of traffic circuits** | **Training of 1st Night flight with instructor + skill test** | **1st Night flight with instructor + skill test** | **1st Night flight with instructor + skill test** |
| **Minimum Requirement** | **3 take-offs & landing in preceding 90 days- Aided** | **Initial NVG training according to syllabus (2.7 e)** | **Initial NVG training according to syllabus (2.7 e)** | **Initial NVG training according to syllabus (2.7 e)** |
| **Day- CAT and General Flights** | **Caring out at least 3 take-offs and landings** | **Recurrent flight of at least 30 min’ Traffic circuits and Emergencies** | **Training and annual skill test with check airman or instructor** | **Emergency training and annual skill test with check airman or instructor** |
| **Minimum Requirement** | **At least one flight of min’ 1 HR** | **At least 2 flights of 1 HR each** | **At least 6 flights of 1 HR each** | **At least 6 flights of 1 HR each every 12 months** |
| **Instructor**  **Check airman** |  | **Recurrent flight from left seat of at least 30 min’ Traffic circuits and Emergencies** | **Recurrent flight from left seat of at least 30 min’ simulating skill test** | **Re-certifying Full instructor / check airman syllabus** |
| **Minimum Requirement** | **As instructor 1 flight from left seat** | **2 flights from left seat, training or skill test** | **3 flights from left seat, training or skill test** | **6 flights from left seat, training or skill test** |

# Content: Training Syllabus and Checking Programs

## Operator Type Rating / Conversion Training and Checking - General

* + 1. A flight crew member shall complete the operator conversion training course before commencing unsupervised flying:
       1. When joining the Company; see syllabus details in Part D chapter 2.2
       2. When changing to an aircraft for which a new type rating is required. See syllabus details in Part D chapter 2.3
       3. When certified as instructor or check airman in the company, see syllabus details in part D chapter 2.4
    2. The operator’s conversion training course may be combined with a type rating training course as required.
    3. The type rating and operator conversion course content must take into account the mandatory and recommended elements for the relevant type.
    4. The operator conversion course includes training on all equipment installed on the aircraft as relevant to the operation and flight crew members’ roles.
    5. The operator conversion training may be combined with a command upgrade.
    6. CRM training shall be integrated into the operator conversion training course.
    7. The operator conversion training includes the following which must be completed in the stated order:
       1. Ground training and checking, including aircraft systems, and normal, abnormal and emergency procedures.
       2. Emergency and safety equipment training and checking (completed before any flight training in an aircraft commences).
       3. Flight training for the Type Rating Course and Operator Conversion Course.
       4. Skill Test
       5. Operator Proficiency Check.
       6. Dangerous Goods Training
       7. Checklist philosophy and use of checklists, including use of the emergency checklist in both Pilot Flying and Pilot Monitoring roles.
       8. Standard briefs.
    8. Mutual supervision, monitoring and standard call out procedures for flight path deviation and alerting purposes, including responses and actions.
    9. Division of crew duties regarding operation of the aircraft and its systems. SOP and EOP.

## Integration Of a New Pilot / Returning Pilot

* + 1. General
       1. Training program for Integration of a new pilot is similar to Returning Pilot program in order to ensure that all pilots adhere to the same knowledge standard.
       2. Note - Returning pilot will be a pilot who did not fly on the same type of helicopter for more than 12 months.
       3. In case that the new pilot is certified and has type rating on the company’s helicopters he will be exempt from performing the training part relating to the type rating
    2. Method
       1. Method of training refer: to Part D chapters 1.1-1.10
       2. Type rating certification refer to Part D chapter 2.3
       3. Duration of ground training is minimum 3 days or as long as required, depends on applicant experience.
       4. Ground training in this chapter is not part of the type rating / conversion training.
    3. Prerequisite
       1. Prerequisite are detailed in Part D chapter 1.7
    4. Ground Syllabus
    5. The training will be conducted on a site that meets the requirements according to section 1.4 of this part**.**

| **Subject** | **Content** | **Aids** | **Instr\*** | **Duration** | **Date** | **Sign’** |
| --- | --- | --- | --- | --- | --- | --- |
| Operation Manual | OM content and use + operational specifications ("Mifratei Hafa’ala") | OM | Chief pilot/Ops manager | **0:45** |  |  |
| Company organogram | Company organization & interaction | OM | Ops Manager  Ops Manager | **0:30** |  |  |
| Nominated persons duties | OM |  |  |
| Aircrew | Duties & responsibilities of aircrew | OM | Chief pilot | **0:15** |  |  |
| Flight preparations | Mission understanding | OM | Chief pilot/Ops manager | **1:30** |  |  |
| Operational dispatching | OM |  |  |
| Operational flight plan | OM |  |  |
| Fuel calculation / policy | OM |  |  |
| C & G | FM/OM |  |  |
| Aircraft loading | FM/OM |  |  |
| Visibility limitations | OM |  |  |
| Crew briefing | OM |  |  |
| Autopilot min altitude |  |  |  |
| Passengers | Air taxi mission CAT | OM | Chief pilot/Ops manager | **1:00** |  |  |
| Passengers briefing | OM |  |  |
| Passengers’ security checks | OM |  |  |
| Dangerous goods | OM |  |  |
| A/C documents | Required flight documents, charts | OM | Camo | **00:30** |  |  |
| Log Book | OM |  |  |
| Airports | Airports and helipads in use | OM/AIP | Chief pilot/Ops manager | **0:30** |  |  |
| Operation area | OM |  |  |
| Hangar Emergency | Ground procedures in the hanger/premises | OM | Mechanic/Camo | **0:30** |  |  |
| AIS | Air information services interaction | AIP | Chief pilot/Ops manager | **0:20** |  |  |
| Normal & Emergency procedures | Weather, meteorological information  Including: weather phenomena, principles of front-systems, alopecia, fog, thunderstorms, wind shear | WEB | Chief pilot/Ops manager | **0:45** |  |  |
| Minimum flight altitude | OM | Chief pilot/Ops manager | **0:45** |  |  |
| Minimum visibility | OM |  |  |
| Flight time limitations | OM |  |  |
| Commander duties and responsibilities | OM |  |  |
| Hand over of controls | OM |  |  |
| Max rate of descent | OM/FM |  |  |
| Emergency procedures in flight & on Ground | FM/OM | Chief pilot/Ops manager | **0:45** |  |  |
| Emergency, first-aid & fire extinguishing equipment | OM |  |  |
| Illnesses, injuries or other special conditions related to passengers or crew | OM |  |  |
| Aircraft hijackings and other special situations | OM |  |  |
| Fire in flight or on the ground and smoke control procedures | Emergency Checklist |  |  |
| NOP EOP | FM/OM |  | **00:30** |  |  |
| MEL | OM/MCM | Camo | **01:00** |  |  |
| Wind limitations | OM | Chief pilot/Ops manager | **0:45** |  |  |
| Incident / occurrence report | OM |  |  |
| Ground emergency evacuation including Doors/Windows jettison |  |  |  |
| CRM | CRM + Monitoring calls and response | OM | Chief pilot/Ops manager | **0:45** |  |  |
| Flight dispatching | Simulation of flight planning and execution | OM | Ops Manager | **0:45** |  |  |
| Safety | Safety policy and reviewing of events | OM | Chief pilot/Ops manager | **0:30** |  |  |
| Case study | Issues and response with Chief Pilot | OM | CP | **0:30** |  |  |
| Preflight | Preflight certifying by AMO | MCM | Camo | **0:45** |  |  |
|  | ASSESSMENT |  |  |  |  |  |

**\*** Chief pilot/Ops manager can appoint another pilot or trainer to carry out the training.

* + 1. Flight Training Syllabus

Flight training syllabus comprises of 3 flights

| **Flight no** | **Topic** | **Comments** |
| --- | --- | --- |
| **1** | Recurrent flight, 30 min’ or as required, standard and emergency procedures, operation area training. | Pilot didn’t fly for more than 3 months.  Similar to annual skill test flight, operation area training |
| **2** | Proficiency skill test. | Refer to Part D chapter 1.17.a  Operation area certifying. |
| **3** | Route/Area/Aerodrome qualification check flight | Refer to Part D chapter 1.17.b  Can be conducted during one of the company’s flights with check airman in left seat or as wing man in case of 2 helicopters flying together. |
| **4** | Recurrent **night** flight, min 45 min, 5 traffic circuits in operation area, No training of emergency procedures at night | Pilot didn’t conduct any night flight in preceding 90 days |

## Type Rating / Conversion Training on S76

* + 1. General
       1. The objective of the training program is to train the applicant and impart professional knowledge and professional flight skills that enable him to fly the S76 as flight commander under VFR conditions.
    2. Method
       1. Method of training: refer to Part D chapters 1.1-1.10
       2. The training program comprises of ground training and flight training.
       3. Training flights shall be conducted with fully certified flight instructor.
       4. The applicant shall:
          1. Prove professional knowledge, Flight Regulation 183 (licenses to airman), i.e., written tests of “open book” and “close book” given by the CAAI.
          2. Complete 4 training Flight hours Regulation 184 (licenses to airman).
          3. Prove his flying skills and theoretical knowledge in front of CAAI check airman Flight Regulation 185 (licenses to airman).
          4. Flight instructor shall not proceed to the next drill or flight if the applicant does not meet the requirements and the parameters as described in type rating proficiency check form.
          5. Training flight shall be prepared as any other flight in the company i.e., fuel calculation, C&G, weather, CRM etc’.
    3. Prerequisite
       1. Prerequisite are detailed in Part D chapter 1.7.
       2. The applicant completed his integration training program as detailed in Part D chapter 2.2 .
    4. Ground Training Syllabus
       1. Time frame for each class is subject to the experience and knowledge of the applicant.
       2. The training will be conducted on a site that meets the requirements according to section 1.4 of this part.

| **Subject** | **Content** | **Inst’** | **Date** | **Sign’** |
| --- | --- | --- | --- | --- |
| Airframe | General description and main components | Flight Instructor or an appointed instructor | 1:00 |  |
| Transmissions | Power transfer system, main rotor, tail rotor | 1:00 |  |
| Cockpit | Crew compartment, instruments, lights, levers. | 1:00 |  |
| Steering | Steering system description and operation | 1:00 |  |
| Hydraulic | System description, servo, warning lights | 1:00 |  |
| Autopilot | System description and operation | 1:30 |  |
| Fuel | Fuselage fuel system, quantities, warning lights | 1:00 |  |
| Electricity | System description, generators, warning system | 1:30 |  |
| Power plant | Description, oil and fuel systems, air flow, warning and caution lights, fire detectors | 1:00 |  |
| Ventilation | Heating and ventilation, air conditioner, | 0:45 |  |
| Lighting | Interior and exterior lighting systems | 0:45 |  |
| Avionic | Operation of avionic systems TCAS GPWS TAWS | 1:00 |  |
| Flight Manual | General familiarization | 1:00 |  |
| Normal proc’ | Normal procedures, starting, flying, A/C limitations | 0:45 |  |
| EOP | Emergency procedures, warning & caution lights | 1:15 |  |
| Pre-flight | External checks and internal checks before start up | 0:45 |  |
| C & G | Calculations and limitations A/C configurations | 1:00 |  |
| MEL | MEL | 0:30 |  |
| Malfunction | Tail rotor, loose of tail rotor, fix pitch | 4:00 |  |
| Hydraulic 1 system, 2 systems, |  |
| Engine in flight, startup and shut down, governor |  |
| Combiner gearbox malfunctions |  |
| Fire in all sections |  |
| Electricity |  |
| Chips |  |
| Performances | Helicopter performances under varying conditions | 1:00 |  |
| Flight plan | Fuel consumption, flight envelope, power, | 0:45 |  |
| Technical | Ads, SBs, special instructions from manufacturer | 0:30 |  |
| Safety | Safety tips specific to the helicopter, case study. | 0:30 |  |
|  |  |  |  |

* + 1. Flight Training Syllabus
       1. General syllabus

| **Flight No’** | **Subject** | **Content** | **Flight Duration** | **Accumulated time** |
| --- | --- | --- | --- | --- |
| 1 | Traffic circuits hover | Basic flying of the helicopter, ground maneuvers, Traffic circuits hover taxi, 360, | 1:00 | 1:00 |
| 2 | Traffic circuits  Autorotation | Traffic circuits, steep, shallow,  Autorotation, forward, 90, 180  OEI-one engine inoperative,  Engines malfunctions | 1:00 | 2:00 |
| 3 | Malfunctions  Operation area  Confined area | Tail rotor malfunctions  Hydraulic malfunctions  Slopes, general quick stop landings, gauges & indicators inoperative.  Unusual attitude recovery  Confined area | 1:00 | 3:00 |
| 4 | Rehearsal flight | Practicing emergencies as required by the trainee or the instructor.  Simulation of type rating check | 1:00 | 4:00 |

* + 1. **Detailed syllabus**
       1. Flight no’ 1

| **Applicant name:** | **Date:** |  |
| --- | --- | --- |
| **Topics** | T.O time: |  |
| * Flight briefing * Preflight checks * Start up, taxi, take off * Ground maneuvers * Traffic circuits * Returning to base * Shut down * Flight debriefing | Landing time: |  |
| Flight time: |  |
| Accumulated time: |  |
| Weather |  |
| Instructor |  |
| Signature |  |
|  |  |
|  |  |

| **Topic** | **Comments** | **Requirements** | **Assess** |
| --- | --- | --- | --- |
| **Flight briefing**   * Performances +C&G * Weather + NOTAMs * Crew briefing * Drills briefing * Safety |  | Knowledge of all procedures. |  |
| **Preflight checks**   * External checks * Untying + covers * Pax compartment check * Energex equipment * Logbook * A/C Documents |  | Knowledge of all procedures and equipment |  |
| **Startup**   * Interior checks * Startup   Runup checks   * Taxi * Take off * Flying to training area |  | Using of standard checklist |  |
| **Ground maneuvers**   * Hover IGE & OGE * 360 in hover * Taxing in all axis * Vertical landings & T.O |  | \*/- 5’ in hover  \*/-10 degrees from nose defined direction |  |
| **Flight positions**   * S & L * Climbing * Descending * Speed varying * Flight transitions |  | \*/- 5 deg’ in direction  \*/- 50’ in alt’  \*/- 10KT |  |
| **Traffic circuits**   * Normal approach * Take off profile * Final profile * Using of checklist * Flying to base |  | \*/- 5 deg’ in direction  \*/- 50’ in alt’  \*/- 10KT  Descent limitations |  |
| **After landing**   * Taxi to parking * Shut off procedures * Aircraft tying * Logbook |  | Complying with procedures and checklist |  |
|  |  |  |  |
| Debriefing | | |  |
| Topics for next flight | | |  |
| Instructor summary | | |  |
|  |  |  |  |
|  |  |  |  |

* + - 1. Flight no’ 2

| **Applicant name:** | **Date:** |  |
| --- | --- | --- |
| **Topics** | T.O time: |  |
| * Flight briefing * Preflight checks * Start up, taxi, take off * Ground maneuvers * Traffic circuits * Autorotation * Shut down * Flight debriefing | Landing time: |  |
| Flight time: |  |
| Accumulated time: |  |
| Weather |  |
| Instructor |  |
| Signature |  |
|  |  |
|  |  |

| **Topic** | **Comments** | **Requirements** | **Assess** |
| --- | --- | --- | --- |
| **Flight briefing**   * Performances +C&G * Weather + NOTAMs * Crew briefing * Drills briefing * Safety |  | Knowledge of all procedures |  |
| **Preflight checks**   * External checks * Untying + covers * Pax compartment check * Energex equipment * Logbook * A/C Documents |  | Knowledge of all procedures and equipment |  |
| **Startup**   * Interior checks * Startup * Runup checks * Taxi * Take off * Flying to training area |  | Using of standard checklist |  |
| **Ground maneuvers**   * Hover * 360 in hover * Taxing in all axis * slope landings |  | \*/- 5’ in hover  \*/-10 degrees from nose defined direction |  |
| **Traffic circuits**   * Standard * Steep * Shallow * Settle with power – demonstration * PC2 take off * Max perf. Take off |  | \*/- 5 deg’ in direction  \*/- 50’ in alt’  \*/- 10KT  Descent limitations |  |
| **Autorotation**   * Forward * 90 deg’ * 180 deg’ * EOI * Governor * Engine indicators |  | \*/- 10KT  Full check list for autorotation  Safe flare  Safe go around  A/C limitations |  |
| **After landing**   * Taxi to parking * Shut off procedures * Aircraft tying * Logbook |  | Complying with procedures and checklist |  |
| **Debriefing** | | |  |
| **Topics for next flight** | | |  |
| **Instructor summary** | | |  |
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|  |  |  |  |

* + - 1. Flight no’ 3

| **Applicant name:** | **Date:** |  |
| --- | --- | --- |
| **Topics** | T.O time: |  |
| * Flight briefing * Preflight checks * Start up, taxi, take off * Ground maneuvers * Operation area/confined area * Autorotation/engines * Various emergencies * Flight debriefing | Landing time: |  |
| Flight time: |  |
| Accumulated time: |  |
| Weather |  |
| Instructor |  |
| Signature |  |
|  |  |
|  |  |

| **Topic** | **Comments** | **requirements** | **Assess** |
| --- | --- | --- | --- |
| **Flight briefing**   * Performances +C&G * Weather + NOTAMs * Crew briefing * Drills briefing * Safety |  | Knowledge of all procedures |  |
| **Preflight checks**   * External checks * Untying + covers * Pax compartment check * Energex equipment * Logbook * A/C Documents |  | Knowledge of all procedures and equipment |  |
| **Startup**   * Interior checks * Startup * Runup checks * Taxi * Take off * Flying to training area |  | Using of standard checklist |  |
| **Ground maneuvers**   * Hover * 360 in hover * Taxing in all axis * Vertical landings & T.O |  | \*/- 5’ in hover  \*/-10 degrees from nose defined direction |  |
| **Operation area**   * Confined area |  | Confined area limitations  Descent limitations  A/C limitations |  |
| **Autorotation/Engines**   * Forward * 90 deg’ * EOI * Single engine flying * Quick stop landings * Fire * Short shaft * Over/under speed |  | \*/- 10KT  Full check list for autorotation  Safe flare  Safe go around  A/C limitations  Knowing all emergencies’ check list by heart |  |
| * **Emergencies** * T/R Fixed pitch * Hydraulic * Lost of T/R efficiency * Electric system * Emergency landings * Fire |  | Knowing all emergencies’ check list by heart  Conducting full procedures . |  |
| **After landing**   * Taxi to parking * Shut off procedures * Aircraft tying * Logbook |  | Complying with procedures and checklist |  |
|  |  |  |  |
| **Debriefing** | | |  |
| **Topics for next flight** | | |  |
| **Instructor summary** | | |  |
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|  |  |  |  |

* + - 1. Flight no’ 4

| **Applicant name:** | **Date:** |  |
| --- | --- | --- |
| **Topics** | T.O time: |  |
| * Flight briefing * Preflight checks * Start up, taxi, take off * Ground maneuvers * Operation area * Autorotation/engines * Various emergencies * Flight debriefing | Landing time: |  |
| Flight time: |  |
| Accumulated time: |  |
| Weather |  |
| Instructor |  |
| Signature |  |
|  |  |
|  |  |

| * **Topic** | **Comments** | **requirements** | **Assess** |
| --- | --- | --- | --- |
| **Flight briefing**   * Performances +C&G * Weather + NOTAMs * Crew briefing * Drills briefing * Safety |  | Knowledge of all procedures |  |
| **Preflight checks**   * External checks * Untying + covers * Pax compartment check * Energex equipment * Logbook * A/C Documents |  | Knowledge of all procedures and equipment |  |
| **Startup**   * Interior checks * Startup * Runup checks * Taxi * Take off * Flying to training area |  | Using of standard checklist |  |
| **Ground maneuvers**   * Hover * 360 in hover * Taxing in all axis * Vertical landings & T.O |  | \*/- 5’ in hover  \*/-10 degrees from nose defined direction |  |
| **Operation area**   * Confined area |  | Confined area limitations  Descent limitations  A/C limitations |  |
| **Autorotation/Engines**   * Forward * 90 deg’ * OEI * strange situation recovery * Quick stop landings * Fire * Short shaft * Over/under speed |  | \*/- 10KT  Full check list for autorotation  Safe flare  Safe go around  A/C limitations  Knowing all emergencies’ check list by heart |  |
| **Emergencies**   * T/R Fixed pitch * Hydraulic * Lost of T/R efficiency * Electric system * Emergency landings * Fire |  | Knowing all emergencies’ check list by heart  Conducting full procedures . |  |
| * **After landing** * Taxi to parking * Shut off procedures * Aircraft tying * Logbook |  | Complying with procedures and checklist |  |
|  |  |  |  |
| **Debriefing** | | |  |
| **Topics for next flight** | | |  |
| **Instructor summary** | | |  |
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|  |  |  |  |

## Certifying of Instructor / Check airman in The Company

* + 1. General
       1. Training program for certifying an instructor or check airman is similar.
       2. Chief pilot will get CAAI ‘s written approval for certifying specific pilot as a check airman. Obtaining of prior written approval from CAAI is mandatory.
       3. Both applicants shall be certified commanders on the company’s helicopters.
    2. Method
       1. Method of training: refer to Part D chapters 1.1-1.10.
       2. The training program comprises of ground training and flights training.
       3. Training flights shall be conducted with fully certified commander at the right seat.
       4. Training program complies with flight regulations 332, 333.
       5. Chief Pilot will announce to CAAI about the completion of the training program
       6. CAAI may authorize the pilot as a Check-airman after determining to CAAI satisfaction that the pilot is suitable to serve as a Check-airman
    3. Rights of Company Check airman
       1. Company check airman is certified to conduct annual type rating proficiency check and route/aerodrome qualification knowledge test as stated in flight regulations 318, 321.
    4. Prerequisite
       1. Instructor Training Prerequisite
          1. The applicant shall:

Hold a valid flight instructor license.

Holds a valid CPL with company’s helicopters type rating.

Be certified as a commander in the company.

Hold a valid medical certification.

At least 5 FHs’ on type.

Complete annual ground and aerial recurrent training.

* + - 1. Check airman Training Prerequisite
         1. The applicant shall:

Holds a valid CPL with company’s helicopters type rating.

Be certified as a commander in the company.

Hold a valid medical certification.

Have at least 5 FHs’ on type.

Complete annual ground and aerial recurrent training.

Obtaining written Prior approval from CAAI to certify the check airman

* + 1. Ground Training Syllabus
       1. The training will be conducted on a site that meets the requirements according to section 1.4 of this part.

|  | **Subjects** | **Trainer** | **Duration** | **Date** | **Sign’** |
| --- | --- | --- | --- | --- | --- |
| 1 | Flight Law regulations 318, 321, 323, 332, 333 &OM | Flight Instructor | 0:30 |  |  |
| 2 | Responsibilities and duties of Check airman/Instructor. | Flight Instructor | 0:15 |  |  |
| 3 | Methods and technics of conducting skill check/training. | Flight Instructor | 0:15 |  |  |
| 4 | Skills assessment and parameters. | Flight Instructor | 0:10 |  |  |
| 5 | Conducting of annual type rating proficiency check and route/aerodrome qualification test in the company. | Flight Instructor | 0:30 |  |  |
| 6 | Recurrent training of examinee during the skill check. |  |  |
| 7 | Recurrent training of A/C systems, and limitations. |  |  |
| 8 | Recurrent training of SOP and EOP of certain type |  |  |
| 9 | Recurrent training of flight preparation. |  |  |
| 10 | Recurrent training of operation /confined area limitations |  |  |
| 11 | Case study of safety events. | Flight Instructor | 0:15 |  |  |
| 12 | Forms filling and recording. | Flight Instructor | 0:15 |  |  |
| 13 | Instructor – trainee relations | Flight Instructor | 0:15 |  |  |

* + 1. **Flight Training Syllabus**
       1. All flights to be conducted from the left seat.
       2. Each flight – at least 50 minutes.
       3. Certified flight instructor can skip flight no’ 1

| **Flight no’** | **Subject** | **Content** | **Comments** |
| --- | --- | --- | --- |
| 1 | Normal and emergency procedures training from left seat. | Conducting the flying part from type rating proficiency check form, satisfying flight’s standards appear in the form. | Emphasizing safely conducting of all emergency drills.  The appropriate safety precautions to be taken from each of the pilot seats in emergencies that may develop during training; |
| 2 | Full simulation of type rating proficiency check | . Trainer conduct emergency and normal procedures from right seat while forcing the trainee to intervene and hand over the controls during the flight. | Trainee conduct all emergency procedure from left seat as well.  Possible results from taking inappropriate safety precautions while training.  Filling the form at the end of the flight |
| 3 | Proficiency check with CAAI check airman | Can be conducted during official type rating proficiency check of one of the company’s pilot. | CAAI check airman certifies the trainee |

## EMS Training

* + 1. **General**
       1. The objective of the training program is to train the applicant and impart professional knowledge and professional flight skills that enable him to operate as EMS (Emergency Medical Services) crew member.
    2. **Method**
       1. Method of training: refer to Part D chapters 1.1-1.10
       2. The training program comprises of ground training and flights training.
       3. Training flights shall be conducted with certified flight instructor.
       4. The applicant shall:
          1. Complete the ground training according to the following syllabus.
          2. Pass a written exam at a minimum score of 80%.
          3. Commencement of training flight is subject to completion of ground training and passing the written exam.
          4. Complete the training Flights according to the following syllabus.

Note: The company's chief pilot is authorized to update the training program for experienced EMS pilots according to their experience and background pending CAAI approval.

* + - * 1. Training flight shall be prepared as any other flight in the company i.e., fuel calculation, C&G, weather, CRM etc’.
    1. Pilots Prerequisite
       1. The applicant completed his integration training program as detailed in Part D chapter 2.2 or he is already a commander pilot in the company.
    2. Pilot Ground Training Syllabus

| **Subject** | | **Content** | **Means** | **Instructor& Location** | **Duration** | **Date** | | **Sign** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EMS SITE | | The instructor shall review the company’s operation at it’s EMS Sites in accordance with its OPS Manual:   * The instructor shall review the overall site showing aircraft location, rest areas, security and ground safety hazards * The instructor shall review the relevant procedures of the EMS site in accordance with the AIP and explain the deviations from the AIP as approved for the HEMS mission * The instructor shall review the location of GSE, fuel and any other necessary facilities | AIP  OPS Manual Part C Article 9.3  Special HEMS Approvals on site  Google Earth/Maps for each site orientation | HEMS Pilot  Approved Classroom | 00:45 |  | |  | |
| EMS SITE PROCEDURES | | * The instructor shall review the company’s procedures from shift start, through launch procedures and shift completion: * The instructor shall review the different HEMS configurations as approved by CAAI. * The instructor shall review the crew composition for a HEMS mission (minimal and preferred). * The instructor shall review the shift change process and provide best practices. * The instructor shall perform together with trainees a sample risk analysis process and review its output and subsequent tasks. * The instructor shall review the company’s HEMS flow chart to demonstrate the launch process as well as broader roles and responsibilities. * The instructor shall simulate together with trainees the launch process including receiving the mission, determining an landing zone, flight towards the landing zone, considerations for landing, loading, and egress towards the relevant hospital. * The instructor shall review the company’s risk analysis document for HEMS. | OPS Manual Part C Article 9.4-9.14  Brook’s HEMS Flow Chart  Brook’s HEMS Risk analysis and mitigation  Brook’s Shift change briefing  Brook’s risk analysis online format  A dedicated presentation | HEMS Pilot  Approved Classroom | 01:30 |  | |  | |
| CRM | | * The instructor shall review the working procedures and relevant CRM for effectively and safely execution a HEMS mission: * The instructor shall present the roles and responsibilities of each crew member during the different phases of a HEMS mission. * The instructor shall review means of communication between the aircrew and medical crew onboard. * The instructor shall highlight best practices, as well as common mistakes, in critical phases of the HEMS mission * The instructor shall review differences from other similar activities (civilian//military). * The instructor shall describe issues that are specifically important for S76 | OPS Manual Part D Article 3.5  OPS Manual Part A Article 8.3  Designated Presentation | Company Instructor  Approved Classroom | 00:45 |  | |  | |
| TRANSPORTATION OF TRAUMA PATIENTS | | * The instructor shall review the professional and medical aspects of transporting trauma patients in HEMS missions: * Means of loading and unloading patients. * The different type of medical emergency that would require HEMS and respective emphasis for flight profile * Review the different hospitals in Israel, their capabilities and the respective medical considerations for evacuation destinations * Describe the procedures for landing and unloading a patient upon arrival to a hospital. * Review the medical equipment onboard and the paramedic’s usage procedures during flight | OPS Manual Part C Articles 9.9, 9.16, 9.17 | MDA Senior Paramedic | 01:00 |  | |  | |
| MDA | The instructor shall provide an overview of MDA including:   * The organization’s mission statement, org chart and medical capabilities * The development of HEMS services in Israel and MDA’s source of authority | | N/A | MDA Senior Paramedic | 00:30 |  |  | |
| EMS First Shift | A candidate’s first EMS shift shall serve as a transition from the theoretical to practical training.  The first EMS shift shall be performed with either a company instructor or a HEMS pilot with more than 1 year experience in HEMS (not necessarily at Brook)  The trainee shall perform all of the tasks taught in the above lectures in accordance with the OPS Manual and company procedures  In case there is no real-life launch the instructor may initiate a full training flight to complete the qualification. | | OPS Manual Part C Article 9  Company’s Briefing and checklists | Instructor or HEMS Pilot with more than 1 year experience  EMS Location | OJT |  |  | |

* + 1. **Pilot Flight Training Syllabus**

| **Flight No’** | **Subject** | **Content** | **Flight Duration** | **Remarks** |
| --- | --- | --- | --- | --- |
| 1 | Company’s evacuation helipads | An introductory flight with the company's evacuation helipads. Landing in company landing helipads and other landing sites (shetach- haf’ala). | 0:45 | This flight can be performed with more than one trainee when the non-flying trainee is watching from the passenger seat. |
| 2 | Simulated evacuation flight | A simulation of evacuation flight  (it is recommended to include the medical team on this flight for demonstration purpose). | 0:30 | The flight will include the following elements:   * Launching a medical evacuation flight. * Landing in a simulated evacuation scene. * Landing in a hospital helipad. |
| 3 | Elevated helipads | 3 takeoffs & landings on an Elevated- helipad. | 0:30 | \*This flight is not mandatory for EMS pilot certification |
| 4 | PM qualification | A simulation of evacuation launch – the flight will focus on the difference between PM and PF in a HEMS mission including receiving mission information, route planning, landing zone planning during launch and safety monitoring at landing zone. | 0:15 | Flight can be conducted with any company instructor or trainer |

* + 1. **Medical Crew Ground Training Syllabus**:

| **Subject** | **Content** | **Means** | **Instructor& Location** | **Duration** | **Date** | **Sign** |
| --- | --- | --- | --- | --- | --- | --- |
| ORIENTATION | The instructor shall provide an overview of Brook, the S76 Helicopter and it’s standard and emergency procedures.  The instructor shall also provide an overview of pilot training at Brook as well as the different physiological aspects of flight. | Dedicated Presentation  OPS Manual Part D Article 2.5 | HEMS Pilot  Approved Classroom |  |  |  |
| EMS SITE | The instructor shall review the company’s operation at it’s EMS Sites in accordance with its OPS Manual:   * The instructor shall review the overall site showing aircraft location, rest areas, security and ground safety hazards * The instructor shall review the relevant procedures of the EMS site in accordance with the AIP and explain the deviations from the AIP as approved for the HEMS mission * The instructor shall review the location of GSE, fuel and any other necessary facilities | AIP  OPS Manual Part C Article 9.3  Special HEMS Approvals on site  Google Earth/Maps for each site orientation | HEMS Pilot  Approved Classroom | 00:45 |  |  |
| EMS SITE PROCEDURES | The instructor shall review the company’s procedures from shift start, through launch procedures and shift completion:   * The instructor shall review the different HEMS configurations as approved by CAAI. * The instructor shall review the crew composition for a HEMS mission (minimal and preferred). * The instructor shall review the shift change process and provide best practices. * The instructor shall perform together with trainees a sample risk analysis process and review its output and subsequent tasks. * The instructor shall review the company’s HEMS flow chart to demonstrate the launch process as well as broader roles and responsibilities. * The instructor shall simulate together with trainees the launch process including receiving the mission, determining an landing zone, flight towards the landing zone, considerations for landing, loading, and egress towards the relevant hospital. * The instructor shall review the company’s risk analysis document for HEMS. | OPS Manual Part C Article 9.4.-9.14  Brook’s HEMS Flow Chart  Brook’s HEMS Risk analysis and mitigation  Brook’s Shift change briefing  Brook’s risk analysis online format  A dedicated presentation | HEMS Pilot  Approved Classroom | 01:30 |  |  |
| CRM | The instructor shall review the working procedures and relevant CRM for effectively and safely execution a HEMS mission:   * The instructor shall present the roles and responsibilities of each crew member during the different phases of a HEMS mission. * The instructor shall review means of communication between the aircrew and medical crew onboard. * The instructor shall highlight best practices, as well as common mistakes, in critical phases of the HEMS mission * The instructor shall review differences from other similar activities (civilian//military). * The instructor shall describe issues that are specifically important for S76 | OPS Manual Part D Article 3.5  OPS Manual Part A Article 8.3  Designated Presentation | Company Instructor  Approved Classroom | 00:45 |  |  |
| TRANSPORTATION OF TRAUMA PATIENTS | The instructor shall review the professional and medical aspects of transporting trauma patients in HEMS missions:   * Means of loading and unloading patients. * The different type of medical emergency that would require HEMS and respective emphasis for flight profile * Review the different hospitals in Israel, their capabilities and the respective medical considerations for evacuation destinations * Describe the procedures for landing and unloading a patient upon arrival to a hospital. * Review the medical equipment onboard and the paramedic’s usage procedures during flight | OPS Manual Part C Articles 9.9, 9.16, 9.17 | MDA Senior Paramedic | 01:00 |  |  |

* + 1. **Medical Crew Flight Training Syllabus** 
       1. Medical crew with more than 5 flights as a HEMS paramedic (on any type of helicopter) is only required to undergo ground training.
       2. Medical crew with more less than 5 flights as a HEMS paramedic (on any type of helicopter) is required to undergo at least one of the following:
          1. 1 OJT flight with an MDA approved instructor.
          2. Aircraft training with a running engine.
    2. **Operations Desk Manager:** 
       1. Prerequisite:
          1. At least one year of experience in military or civil aviation in either an operations, flight control or flight planning role
       2. Ground Training:

| **Subject** | **Content** | **Means** | **Instructor& Location** | **Duration** | **Date** | **Sign** |
| --- | --- | --- | --- | --- | --- | --- |
| ORIENTATION | The instructor will review the company’s Org Chart as well as the different roles and responsibilities. | OM Part A | Any employee approved by CAO  Approved Classroom | 00:30 |  |  |
| EXTERNAL INTERFACES | The instructor will review the different interfaces with relevant third parties as well as the standard daily/weekly/monthly routine. Third parties include:  IAI (Brook Aviation’s MRO)  ASOC  IAF  MDA | N/A | Any employee approved by CAO  Approved Classroom | 01:00 |  |  |
| AIP | The instructor will review the general rules for civil aviation in Israel under the AIP as well as means of accessing and sourcing the data when needed | ENR 1.1  ENR 1.10  (א-01, א-11) | Any employee approved by CAO  Approved Classroom | 00:45 |  |  |
| FLIGHT PLANNING DATA | The instructor will review the necessary data required to plan and execute a flight as well as means of accessing and sourcing the data, including:  NOTAM Types and common NOTAMs  METAR & SIGWX | NOTAM Website  Weather websites  AirNavPro | Any employee approved by CAO  Approved Classroom | 00:45 |  |  |
| SUPERVISION OF CREW LICENSE, MEDICAL AND QUALIFICATIONS | The instructor will review the relevant company procedures of documenting Pilot data as well as the practical implementation of the data recording | OM Part A 2.2  Brook OPS Data Management System | Any employee approved by CAO  Approved Classroom | 00:45 |  |  |
| BROOK & MDA PROCEDURES | The instructor will review the Brook & MDA workflow for any HEMS flight launch, entailing of:  MDA Medical considerations for when to launch a HEMS flight  MDA Sources of medical data to decide on if and how to launch a flight  Brook & MDA joint procedures for launching a HEMS Flight | OM Part C | Any employee approved by CAO  Approved Classroom | 02:00 |  |  |

* + - 1. Practical Training
         1. Three simulated HEMS Launches utilizing the company’s manuals and checklists
    1. **Operations Duty Manager:** 
       1. Prerequisite:
          1. A senior employee with at least one year of experience in military or civil aviation
       2. Ground Training:

| **Subject** | **Content** | **Means** | **Instructor& Location** | **Duration** | **Date** | **Sign** |
| --- | --- | --- | --- | --- | --- | --- |
| ORIENTATION | The instructor will review the company’s Org Chart as well as the different roles and responsibilities. | OM Part A | Any employee approved by CAO  Approved Classroom | 00:30 |  |  |
| EXTERNAL INTERFACES | The instructor will review the different interfaces with relevant third parties as well as the standard daily/weekly/monthly routine. Third parties include:  IAI (Brook Aviation’s MRO)  ASOC  IAF  MDA | N/A | Any employee approved by CAO  Approved Classroom | 01:00 |  |  |
| AIP | The instructor will review the general rules for civil aviation in Israel under the AIP as well as means of accessing and sourcing the data when needed | ENR 1.1  ENR 1.10  (א-01, א-11) | Any employee approved by CAO  Approved Classroom | 00:45 |  |  |
| FLIGHT PLANNING DATA | The instructor will review the necessary data required to plan and execute a flight as well as means of accessing and sourcing the data, including:  NOTAM Types and common NOTAMs  METAR & SIGWX | NOTAM Website  Weather websites  AirNavPro | Any employee approved by CAO  Approved Classroom | 00:45 |  |  |
| BROOK & MDA PROCEDURES | The instructor will review the Brook & MDA workflow for any HEMS flight launch, entailing of:  MDA Medical considerations for when to launch a HEMS flight  MDA Sources of medical data to decide on if and how to launch a flight  Brook & MDA joint procedures for launching a HEMS Flight | OM Part C | Any employee approved by CAO  Approved Classroom | 02:00 |  |  |
| EMS LAUNCH POLICY | The instructor shall provide an overview of Brook’s considerations when launching a HEMS flight including but not limited to:  Safety aspects  Interfaces with MDA  Landing sites complexity  Crew fatigue management  Special circumstances | Selected examples from recent HEMS flights | Brook CEO  Approved Classroom | 00:45 |  |  |

* + - 1. Practical Training
         1. Three simulated HEMS Launches utilizing the company’s manuals and checklists
    1. **Training Records**
       1. The company shall maintain a record for each person trained under this section that:
          1. Contains the individual's name, the most recent training completion date, and a description, copy, or reference to training materials used to meet the training requirement.
          2. Is maintained for 24 calendar months following the individual's completion of training.

## Elevated Helipad- Pilot Training

NOTE: The company is currently not certified for Elevated helipads flights, all Elevated helipads related comments below shall only apply subject to CAAI certification, Elevated helipads related items have been removed with a strikeline.

* + 1. General
       1. The purpose of the training program is to train the candidate and impart professional knowledge and flight skills that enable him to land on Elevated Helipads.
    2. Method
       1. Method of training: refer to Part D chapters 1.1-1.10
       2. The training program comprises of ground training and flights training.
       3. Training flight shall be conducted with Chief pilot/flight instructor.
       4. The applicant shall:
          1. Complete the ground training according to the following syllabus.
          2. Pass a written exam at a minimum score of 80%.
          3. Commence of training flight is subject to completion of ground training and passing the written exam.
          4. Complete the training Flight according to the following syllabus.
       5. Training flight shall be prepared as any other flight in the company i.e., fuel calculation, C&G, weather, CRM etc’.
    3. **Prerequisite**
       1. The applicant completed his integration training program as detailed in Part D chapter 2.2 or he is already a commander pilot in the company and will keep records in each crew file .
    4. **Ground Training Syllabus**

| **Subject** | **Content** | **Means** | **Instructor& Location** | **Duration** | **Date** | **Sign** |
| --- | --- | --- | --- | --- | --- | --- |
| INTRODUCTION | The instructor will provide a farmiliarization with different types of Elevated Helipads and their unique characteristics that require special training.  The instructor will review all of the phases from arrival to departure of an Elevated Helipad including the PC2 technique in accordance with the OPS manual with an emphasis on W&B as well as maximum mass calculation.  The instructor will demonstrate and practice with the trainees the relevant CRM when landing on Elevated Helipads | OPS Manual Part D Appendix A  Dedicated Presentation | Company Instructor  Approved Classroom | 00:45 |  |  |
| LIMITATIONS AND RISKS | The instructor shall review the unique characteristics of Elevated Helipads and their associated risks.  The instructor shall review the proper mitigations embedded in the T/O and Landing technique  The instructor shall review the specific weather limitations for Elevated Helipads as well as the specific procedures to such helipads which the company might utilize | OPS Manual Part C Articles 8.4 and 8.12  AIP  Dedicated Presentation | Company Instructor  Approved Classroom | 00:30 |  |  |
| EMERGENCY | The instructor shall review the different procedures to follow given an Emergency on an elevated helipad including but not limited to engine failure | OPS Manual Part C Appendix A  Dedicated Presentation  RFM | Company Instructor  Approved Classroom | 00:15 |  |  |
| HELIPAD LANDING TEAM (OFFSHORE ONLY) | The Instructor shall review the role of the Helipad Landing Officer (HLO) at specific locations as well as the loading an unloading procedures. | TBD | Company Instructor  Approved Classroom | 00:15 |  |  |

* + 1. **Flight Training Syllabus**

| **Flight No’** | **Subject** | **Content** | **Flight Duration** | **remarks** |
| --- | --- | --- | --- | --- |
| 1 | Normal landings | 3 landings & takeoffs on Elevated Helipad | 0:25 | PC2 Technique (see Appendix A) |
| Emergencies | Loss of engine power before or after Decision Point (DP) during takeoff or landing | 0:15 |  |
| 2 | PM tasks | Single landing on elevated helipads as PM | 0:15 |  |
| 3 | Night landing | Single night landing on an elevated helipad | 0:30 | Must follow a day flight at the same day (not necessarily an elevated helipads) |

**All flight shall be documented at the pilot's personal file**

## Night Vision Goggles- pilot training

* + 1. General  
       The purpose of the training program is to provide the pilot with professional knowledge and flying skills that enable him to use night vision goggles during the flight.
    2. Method
       1. Method of training: refer to Part D chapters 1.1-1.10
       2. The training program comprises of ground training and flight training.
       3. Training flights shall be conducted with a Certified Flight instructor.
       4. Special requirements for NVG Initial Flight Instructor:
          1. Has a pilot and flight instructor certificate with the applicable category and class rating for the training;
          2. If appropriate, has a type rating on his or her pilot certificate for the aircraft;
          3. Is pilot in command qualified for night vision goggle operations in accordance with Operator approved OM Part D manual.
          4. Has logged 100 night vision goggle operations as the sole manipulator of the controls;
          5. Has logged 20 night vision goggle operations as the sole manipulator of the controls in the category and class, and type of aircraft, if aircraft class and type is appropriate, that the training will be given in;
          6. Is qualified to act as pilot in command in night vision goggle operations.
          7. CAAI Approval.
       5. The applicant shall:
          1. Complete the ground training according to the following syllabus prior to the commencement of training flights.
          2. Complete the training flights according to the following syllabus.
       6. Training flights shall be prepared as any other flight in the company i.e., fuel calculation, C&G, weather, CRM etc’.
    3. Prerequisite
       1. The applicant has completed his integration training program as detailed in Part D chapter 2.2 or he is already a PIC/SIC in the company.
       2. The applicant has previous Night Vision aided flight experience of at least 40 FH in either civilian or military aviation.
    4. Ground Training Syllabus

| **SUBJECT** | **CONTENT** | **MEANS** | **INSTRUCTOR& LOCATION** | **DURATION** | **DATE** | **SIGN** |
| --- | --- | --- | --- | --- | --- | --- |
| Introduction | The instructor will provide training regarding the use of the NVG special equipment with an emphasis on helmet and goggles.  The instructor will provide training regarding the helicopter equipment with an emphasis on NVG helicopter special lighting.  The instructor will review all flight phases from startup the Helicopter through the hole flight parts until landing and shutdown with regards to NVG use.  The instructor will demonstrate and practice with the trainees the relevant CRM when using NVG for night flights. | OPS Manual Part D sec. 2.7  Dedicated Presentation | Company Instructor  Approved Classroom | 00:20 |  |  |
| Limitations & Risks | Applicable portions that relate to NVG limitations and flight operations.  Aeromedical factors related to the use of night vision goggles, including how to protect night vision, how the eyes adapt to night, self-imposed stresses that affect night vision, effects of lighting on night vision, cues used to estimate distance and depth perception at night, and visual illusions. | OPS Manual Part D sec. 2.7  Dedicated Presentation | Company Instructor  Approved Classroom | 00:30 |  |  |
| Normal procedures | The instructor shall review the NVG operation flight planning, including night terrain interpretation and factors affecting terrain interpretation. | OPS Manual Part D sec. 2.7  Dedicated Presentation | Company Instructor  Approved Classroom | 00:20 |  |  |
| Emergency procedures | The instructor shall review the different procedures to follow given a normal and abnormal operations of NVG equipment including Goggles failure in the last part of the final approach. | OPS Manual Part D sec. 2.7  Dedicated Presentation | Company Instructor  Approved Classroom | 00:30 |  |  |

* + 1. Flight Training Syllabus

| **Flight No’** | **Subject** | **Content** | **Flight Duration** | **remarks** |
| --- | --- | --- | --- | --- |
| 1 | Basic training | 2-3 landings & takeoffs during normal traffic patterns including climbout, cruise, descent and approach. | 0:30 | 1. Training in lighted helipad or runway. The training will include the following:    * + 1. Preflight and use of internal and external aircraft lighting systems for night vision goggle operations.        2. Preflight preparation of NVG for NVG operations.        3. Proper piloting techniques when using NVG during the takeoff, climb, enroute, descent, and landing phases of flight.        4. hovering tasks required to use NVG when operating helicopters during the hovering phase of flight.        5. Slope landings. 2. Area departure and area arrival tasks. |
| Transitioning | transitioning from aided to un-aided night flight & vice-versa. | 0:10 | Transition training above 500’ AGL. |
| 2 | Advanced training | 2-3 landings & takeoffs.  Advanced training. | 0:30 | (i)Training in one of the company’s LZ’s, confined area or other suitable HEMS Landing site.  (ii)Go arround procedure in the final stages of the approach , simulating getting into heavy dust environment. |
| Emergencies | Emergency scenarios. | 0:10 | Training will include Abnormal and emergency flight operations using NVG, including simulation of NVG malfunctions in the last part of the final & Go-around. |
| 3 \* | Extra training flight | Advanced training | 0:40 | The instructor will select topics that require additional practice from the syllabus of flights 1-2 above.  This flight is not mandatory for pilots that have demonstrated NVG flight currency in the previous Two years in either military, police or a civilian organization. |

* + - 1. Throughout the training, the instructor will emphasize and demonstrate the differences between flying with & without NVG, especially in the following areas:
         1. Distortions in altitude estimation during flight and hover.
         2. The difficulty in estimating slopes.
         3. The difficulties arising from the NVG limited field of view.
         4. Effect of lighting and external glare during NVG flight.
         5. The effect of cabin lighting and internal glare during NVG flight.
    1. Pilot NVG proficiency flight

| **Flight No’** | **Subject** | **Content** | **Flight Duration** | **remarks** |
| --- | --- | --- | --- | --- |
| 1 | Proficency flight | Requried if a pilot does not meet OMA 8.3.s.ix.B requirements. | 0:30 | | | (i)Three takeoffs and three landings, with each takeoff and  landing including a climb out, cruise, descent, and approach phase of flight. | | --- | | (ii) Three hovering tasks. | | (iii) Three area departure and area arrival tasks. | | (iv) Three tasks of transitioning from aided night flight to unaided  night flight and back to aided night flight. | | | --- | --- | --- | --- | --- | |  | |

* + 1. Initial Recurrent training:
       1. Initial Recurrent training shall only be required if a pilot exceeds the OMD 1.18 currency requirements (6 month and above).
       2. Initial Recurrent training shall include an executive summary of article D above as well as the pilot proficiency flight described in detail in article e above.

## Appendix A – Performance Class II (PC2)

* + 1. Performance Class 2 operations are those operations such that, in the event of critical power unit failure, performance is available to enable the helicopter to safely continue the flight, except when the failure occurs early during the take-off maneuver or late in the landing maneuver, in which cases a forced landing may be required.
    2. Introduction
       1. Performance Class 2, “PC2”, offers less risk than a normal takeoff and landing by adhering to a strict profile, reducing exposure time. In the unlikely event of a single engine failure on takeoff or landing, the crew has a greater chance to land or fly away.
       2. The maximum crosswind component for PC2 operations is 35 knots.
    3. Procedure
       1. Target airspeeds, groundspeeds, altitudes, and rates of climb or descent are approximations. While the PF shall attempt to meet target parameters, environmental conditions, aircraft configuration, and operational considerations may result in minor deviations.
       2. Deviations of ± 5 knots from target speeds are acceptable during the maneuver.
       3. PM shall challenge PF when deviations exceed 5 kts from published target speeds during landing or Take Off phase:

| PM Challenge  “Check Airspeed” | PF Response  “Correcting” |
| --- | --- |

* + 1. PM shall challenge PF when Bank/Pitch angles exceed 10**°** from established approach attitude.

| PM Challenge  “Check Bank /Pitch Angle” | PF Response  “Correcting” |
| --- | --- |

* + 1. PM shall challenge PF when sustained rate of descent is greater than 500 FPM during landing phase or rate of climb is less than 500 FPM during Take Off phase:

| PM Challenge  “Check Rate of Climb/Descent” | PF Response  “Correcting” |
| --- | --- |

* + 1. Descending through 300 ft above the touchdown zone altitudes, make callouts based on RADALT and estimated groundspeed.
    2. Elevated Helipad Takeoff
       1. Prior to takeoff/landing
          1. Determine maximum takeoff weight and DP by using the **Class 2 WAT Chart** for the current conditions:

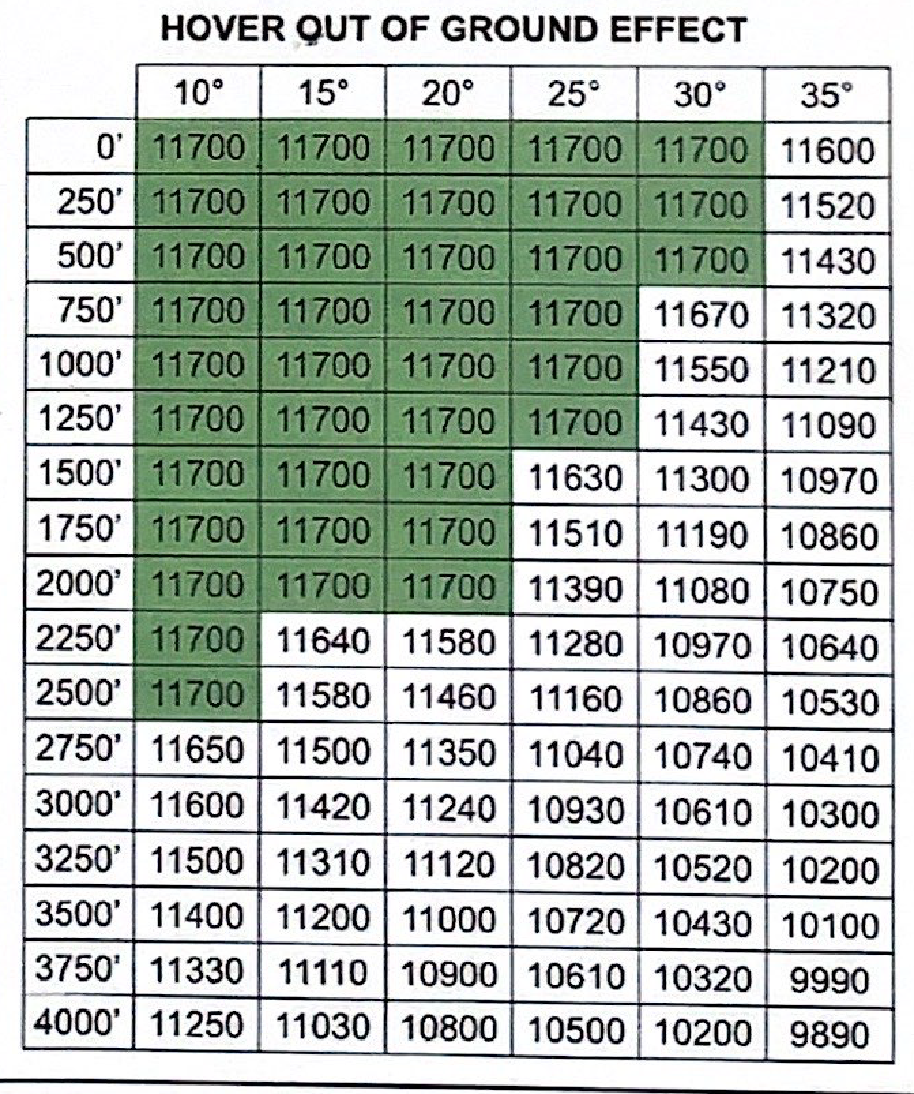
Determine outdoor temperature (30/35/40)

Set engine power, in accordance with last PA check (0/+2/+4/+6)

Determine Max take-off weight, according to the value in the chart based on OGE charts from the RFM.

Table

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* + - * 1. The chart above is referring to altitude 0' - If helipad is set at higher altitude, Max take-off weight shall be calculated in accordance with the chart below:

Determine outdoor temperature (10-35)

Set helipad's altitude (0-4000')

Determine Max take-off weight, according to the value in the chart

\* White cells are referring to situations where max take-off weight, as defined in the RFM, cannot be reached.

Takeoff briefing: Discuss OEI options, target airspeeds, and target torque.

* + - 1. Elevated Helipad Takeoff - Hover
         1. Determine target torque (Hover torque plus 15% minimum) up to 100%:

Facing takeoff direction

Maximum hover torque of 85% to allow for a 15% margin in a 3 to 5 ft. hover

Reduce GW if needed to obtain a minimum of 15% margin

* + - * 1. Stabilize 3 to 5 ft. hover and note torque indications.
        2. Reposition aircraft on the helideck so that the forward edge of the rotor disc is 10 to 15 ft. back from the solid edge of the helideck. If unable, position the aircraft so that the visual reference with the deck will be maintained during takeoff.
        3. PM will announce:

| PM |
| --- |
| “Hover Torque , Target torque ”  (Target Torque is Current torque + 15%) |

* + - * 1. **NOTE: 100% N1 may be the limiting engine parameter.**
      1. Takeoff

Note: Conduct takeoff into the wind to the maximum practical extent with a crosswind component of less than 35 knots.

* + - * 1. Smoothly apply positive power not to exceed 100% torque. Climb vertically to 10 ft with no forward movement.
        2. At 10 ft the PM will announce:

| PM Challenge  “DP” | PF Response  “Rotating” |
| --- | --- |

* + - * 1. The PF will rotate the aircraft by lowering the nose 10˚ below the horizon; maintain target torque until 45 KIAS.

**Note: DO NOT EXCEED engine or transmission limits.**

* + - * 1. At 45 KIAS the PM will announce:

| PM Challenge  “DP2” | PF Response  “Flyaway” |
| --- | --- |

* + - * 1. The PF will rotate the aircraft by raising the nose to attain a climb while accelerating to VY (74 KIAS).

Diagram

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* + - 1. Elevated Helipad Landing - Landing

**Note: PF will visually confirm challenge items; if any challenge items are not complete, PF will execute a “Go Around”.**

* + - * 1. Initiate a normal approach with a maximum target of 500 fpm sustained rate of descent throughout the approach. Optimal rate of descent is 300 – 400 fpm.
        2. If stabilized approach is not achieved by 300’ above the landing surface the PM will announce:

| PM Challenge  “Go Around” | PF Response  “Going Around” |
| --- | --- |

**Note: Calculate altitude by adding the deck height to the appropriate RADALT altitude. When the deck height is unknown, estimate the deck height and add it to the appropriate RADALT altitude.**

**Note: If approach is stabilized by 300’ above the landing surface and the approach is continued the PM shall make the following call outs.**

* + - * 1. PM shall announce:

| PF Response |
| --- |
| “Landing /  Going Around” |

| PM Challenge |
| --- |
| “50’ Above” |
| *“ Down”* |
| *“ Knots”* |
| *“DP”* |

| Target Groundspeed |
| --- |
| 10 knots |

| Target Groundspeed |
| --- |
| 15 knots ± 5 |

| Target Groundspeed |
| --- |
| 20 knots ± 5 |

| Target Groundspeed |
| --- |
| 30 knots ± 5 |

| PM |
| --- |
| “300’ Above” |
| *“ Down”* |
| *“ Knots”* |

| PM |
| --- |
| “200’ Above” |
| *“ Down”* |
| *“ Knots”* |

| PM |
| --- |
| “100’ Above” |
| *“ Down”* |
| *“ Knots”* |

* + - * 1. Observe engine and transmission limitations.
        2. Adjust to level the attitude over the helideck using available power, terminating at a 5 ft hover.
        3. If landing weight was not calculated in advance, on ground, calculation of the weight shall be conducted in accordance with the procedure above – "prior to takeoff/landing".

**NOTE: If the approach becomes unstable and or the sustained rate of descent exceeds 600 fpm, the PM will announce:**

PM Challenge “Go Around”

PF Response “Going Around”

**Note: Conduct landing into the wind to the maximum practical extent, with a crosswind component of less than 35 knots.**

**Note: Ground speed and altitude targets provide an appropriate rate of closure for the PC2 approach profile**

Diagram

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* + 1. **Emergency Procedures – Elevated Helipad Takeoff**
    2. **Engine failure prior to DP**
       1. Land back to takeoff surface
          1. Lower collective to maintain rotor RPM and OEI power limits.
          2. Allow the aircraft to settle vertically onto the helideck.
          3. Apply collective to cushion ground contact.
          4. After touchdown lower collective full down and apply brakes.

Diagram

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* + 1. Emergency Procedures – Elevated Helipad Takeoff
       1. Engine failure after DP
          1. Flyaway

Rapidly pitch nose over to 20˚ below horizon.

Adjust collective to maintain rotor RPM and OEI power limits.

Accelerate to 45 KIAS (DP2) using available drop down altitude.

**Note: At “Airspeed Increasing” begin leveling aircraft to achieve 45 KIAS (DP2).**

If 45 KIAS is achieved at or above 30 ft AWL, the PM will announce:

| PM Challenge  “DP2” | PF Response  “Flyaway” |
| --- | --- |

The PF will adjust the aircraft attitude to climb at VTOSS (55 KIAS) to clear obstacles then accelerate to VY (74 KIAS).

Retract the landing gear when a positive rate of climb is established.

Diagram

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* + 1. Emergency Procedures – Elevated Helipad Takeoff Engine failure after DP
       1. Ditching (when applicable)
       2. If 45 KIAS is not achieved by 30 AWL the PM will announce:

| PM Challenge  “BELOW 30 FEET”  “Ditch” | PF Response  “Ditching” |
| --- | --- |

* + - * 1. Below 30 ft initiate a deceleration to a landing attitude to slow airspeed and rate of descent and apply collective to cushion the landing.
        2. After touchdown, neutralize cyclic and simultaneously reduce collective.
        3. Inflate the floats.
        4. Complete ditching procedures.

Diagram

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* + 1. **Emergency Procedures – Elevated Helipad Landing Engine failure prior DP**
       1. Flyaway
          1. Adjust collective to maintain rotor RPM at 100% and OEI power limits.
          2. Accelerate to VTOSS (55 KIAS), and maintain 100% rotor RPM.
          3. Retract landing gear when positive rate of climb is established.
          4. After clearing obstacles, adjust power and rotor RPM, and accelerate to VY (74 KIAS).

Diagram

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* + 1. Emergency Procedures – Elevated Helipad Landing Engine failure after DP
       1. Land to the helideck
          1. Adjust collective to maintain rotor RPM and OEI limits.
          2. Continue landing profile/angle.
          3. Apply collective to cushion ground contact with no forward movement.Diagram

             Description automatically generated
          4. After touchdown lower collective full down and confirm brakes set

# Ground Training

## Initial Ground Training

* + 1. Ground training shall comprise a properly organized program of ground instruction by training staff with adequate facilities, including any necessary audio, mechanical and visual aids. However, if the helicopter concerned is relatively simple, private study may be adequate if suitable manuals and/or study notes are provided. Refer to Part D chapter 1.4
    2. The course of ground instruction shall incorporate formal tests on such matters, where applicable, as helicopter systems, performance and flight planning. Refer to Part D chapter 1.9
    3. The ground training syllabus should include the following:
       1. The type rating technical ground training course covers the aircraft systems and normal, abnormal and emergency procedures.
       2. The operator conversion course supplementary technical syllabus covering role specific equipment fitted to the aircraft. The syllabus for each helicopter type is specified in the applicable operator conversion type supplement.
       3. Operational procedures and requirements contained in Operations Manuals Parts A to D, including ground de- icing/anti-icing, pilot incapacitation.
       4. Accident/incident and occurrence review.

## Annual Recurrent Ground Training

* + 1. The recurrent ground training program should include the items specified in Part D chapter 3.1. c.
    2. Knowledge of the recurrent ground training should be verified by a questionnaire or other suitable method.
    3. One training day per year should be allocated to the task. Alternatively, the training day may be split into two separate half days conducted at 6 monthly intervals.
    4. Completion of recurrent ground training shall be recorded and entered into each pilot file. A tick against an item in the recurrent ground training section of the OPC form indicates that the training and checking has been satisfactorily completed.

* + 1. Annual Recurrent Ground Training Syllabus

| **Item** | **Subject** | **Content** |
| --- | --- | --- |
| 1 | Standard operation | Missions, Fuel policy, min’ altitude, W&B, preflight, logbook, |
| 2 | Aircraft Systems | Reviewing of A/C systems, 2 of the following:  Powerplant, Hydraulic, Fuel, warning & caution, fire detectors, transmissions, |
| 3 | Avionic | FADEC, TCAS, TAWS GPWS, Navigation |
| 4 | Technical information | Latest AD’s SB’s common malfunctions MEL |
| 5 | Winter training | VMC IMC typical weather in Israel, Visibility limitations, thunderstorm awareness, weather radar, refer to 3.3 |
| 6 | Operation Manual | Updates |
| 7 | AIS AIP | Updates, aerodromes, routes, landing sites. |
| 8 | Flight Law | Regulations updates, Flight time limitations |
| 9 | Case study | Safety events within and out of the company |
| 10 | Ground emergency | Emergency procedures on ground, hangars and premises |
| 11 | CRM | CRM recurrent training, monitoring callas and response |
| 12 | Dangerous goods | Limitations, DG marks, identifying of DG |
| 13 | HEMS | 1. The selection from the air of HEMS operating sites. 2. Familiarity with established HEMS operating sites in the operator’s local area register including all evacuation sites and Hospitals. 3. 3. Review of Elevated Helipads landing procedures |

## Winter Training

* + 1. Winter training is integrated (but not only) within Recurrent Ground Training and includes the following topics:
       1. Typical weather in Israel, especially winter time.
       2. Obtaining of weather information via web, apps AIS IMS (Israel meteorological services) refer to Part C chapter 6.2.
       3. Prohibition of flying in icing conditions.
       4. Visibility limitations.
       5. Speed recommendation in reduced VMC conditions.
       6. TAF METAR
       7. Use of weather radar in the aircraft.
       8. Avoidance of flying in and between clouds.
       9. VMC / IMC conditions.

## Ground Emergency Procedures Training.

* + 1. Ground emergency procedures training are integrated (but not only) within annual recurrent training and includes the follows:
       1. Fire extinguisher, (aircraft and hangar), use and location.
       2. First aid kit – content and basic use.
       3. Way to contact rescue services.
       4. Emergency exits.
       5. Health and safety.
    2. The training will be conducted by one of the company instructors or professional instructor.
    3. This training is included in “integration of new pilot in the company” training.

## Crew Resource Management (CRM) Training and Checking

* + 1. CRM Training – General
       1. CRM is the effective utilization of all available resources (e.g. crew members, aircraft systems, supporting facilities and persons) to achieve safe and efficient operation. The objective of CRM is to enhance the communication and management skills of the flight crew member concerned. Emphasis is placed on the non-technical knowledge, skills and attitudes of flight crew performance.
       2. Flight crew CRM training can be separated as follows:
          1. training in the non-operational environment:

classroom; and

computer-based;

* + - * 1. training in the operational environment:

flight simulation training device (FSTD); and

aircraft.

* + - 1. In general, CRM training is provided in a classroom by a flight crew CRM trainer. Mainly integrated in annual recurrent training.
      2. Training environment. CRM training should be conducted in the non-operational environment (classroom and computer-based) and in the operational environment (FSTD and aircraft). Tools such as group discussions, team task analysis, team task simulation and feedback should be used.
      3. Classroom training. Whenever possible, classroom training should be conducted in a group session away from the pressures of the usual working environment, so that the opportunity is provided for flight crew members to interact and communicate in an environment conducive to learning.
      4. Computer-based training. Computer-based training should not be conducted as a stand-alone training method, but may be conducted as a complementary training method.
      5. Flight simulation training devices (FSTDs). Whenever practicable.
      6. Integration into flight crew training. CRM principles should be integrated into relevant parts of flight crew training and operations including checklists, briefings, abnormal and emergency procedures.
      7. Contracted CRM training. If the operator chooses not to establish its own CRM training, another operator, a third party or a training Organization may be contracted to provide the training. In case of contracted CRM training, the operator should ensure that the content of the course covers the specific culture, the type of operations and the associated procedures of the operator. When crew members from different operators attend the same course, the CRM training should be specific to the relevant flight operations and to the trainees concerned.

* + 1. Training Elements
       1. The CRM training shall include the following:
          1. Automation and philosophy on the use of automation.
          2. Monitoring and intervention.
          3. Resilience development.
          4. The main aspects of resilience development can be described as the ability to:

learn (‘knowing what has happened’);

monitor (‘knowing what to look for’);

anticipate (‘finding out and knowing what to expect’); and

respond (‘knowing what to do and being capable of doing it’).

* + - * 1. Surprise and startle effect. CRM training should address unexpected, unusual and stressful situations. The training should cover:

surprises and startle effects; and

management of abnormal and emergency situations, including:

* + - * 1. Cultural differences. CRM training should cover cultural differences of multinational and cross-cultural crews
        2. Operator’s safety culture and company culture.
        3. Case studies

## TAWS/EGPWS Training

* + 1. If installed – In accordance with devices manuals

## Dangerous Goods Training

* + 1. Dangerous good training will be delivered by certified professional instructor.

* + 1. DG Training Objectives
       1. As transport of dangerous goods is strictly prohibited in the company’s helicopters, the main objective is to ensure the ability of company staff to recognize and handle accordingly dangerous goods.
       2. Training Topics:
          1. Signage of dangerous goods.
          2. Dangerous goods groups.
          3. What is MSDS

Shape

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## Qualifying a foreign pilot

* + 1. Any potential foreign pilot shall be required to complete CAAI’s validation requirements before his first flight and that his foreign license, medical certificate and check-ride will be valid for the entire duration of his employment in the company.
    2. Foreign pilot shall perform the full pilot onboarding process as described in PART A, article 4.1.4.4 and Part D article 3.8.5.
    3. Israeli instructor shall hold an English proficiency level of at least 4.
    4. Foreign pilot shall undergo the following lecture in addition to the standard “Integration of a new pilot” training procedure according to section 2.2 above:

| **Title** | **Content** | **Instructor** | **Location** | **Duration** | **Means** | **Date** | **Sign** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| AIP Class | The instructor shall review the Israeli AIP using a hardcopy or online CVFR map and the relevant extracts of the AIP including ENR 5.1, 5.2, 5.3.(A17 in the Hebrew version) and IANR 93.  The instructor shall provide an overview of the Israeli airspace, the different interactions between civilian and military airspace control,  The different aerodromes that are relevant for the company’s operations and each aerodrome’s procedures  Common mistakes and pitfalls by pilots. | Any pilot at the company with English proficiency of at least 4 | Company offices or suitable classroom | 00:45 | AIP  OM  Part C |  |  |

# Appendixes

## Appendix 1 – Annual proficiency check form

**טופס מבחן רמה**

| שם הנבחן/רשיון: | | | תאריך ביצוע:  תאריך קובע: | | סוג מסוק/רישום: | |
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| תוקף תעודה רפואית: | | | זמן טיסה: | | נתיב שבוצע: | |
| שם הבוחן/רשיון: | | | תוצאות:  **עבר / נכשל** | | חתימת הבוחן: | |
| \* נושא נבדק # מצב טיסה [ ] תרגול מחייב [w] תרגול לא מחייב [T] לפי סוג מסוק | | | | | | |
| טרום טיסה | | | | | | |
|  | [ ] | בדיקות חיצוניות | |  | [ ] | ידע מבנה מסוק (לפי בחירת הבוחן)  \* מגבלות  \* מערכות  \* בד"ח |
|  | [ ] | בדיקות לפני התנעה | |  | [ ] | התנעה  \* תקלות בהתנעה |
|  | [ ] | מכשירי רדיו וניווט | |  | [ ] | ריחוף והסעה |
| בטיסה | | | | | | |
|  | [ ]  [w]  [w] | הקפה  \* רגילה  \* תלולה  \* מזערית | |  | [T] | אוטורוטציה – חד מנועי  # במצבים שונים  \* זיהוי  \* שמירת סל"ד  \* בד"ח  \* פלאר |
|  | [w] | המראה (רוח צד)  # מצבים שונים  \* שמירת כיוון  \* הימנעות ממכשולים | |  | [w] | שטח מוגבל  \* ניתוח משטח  \* התארגנות ונחיתה |
|  | [ ] | אבדן מנוע באוויר  # מהירויות שונות  # בריחוף גבוה  \* זיהוי  \* פעולות מידיות  \* בד"ח חרום  \* נחיתה | |  | [ ] | תקלות מערכות  (בחירה לשיקול מדריך)  # תקלות ממסר  # הידראוליקה  # דלק  # חשמל  # טיס אוטומטי/ הגאים  \* זיהוי ופעולות  \* בד"ח חרום |

|  | [T] | אוטורוטציה – דו מנועי  # בדגש על תהליך הכניסה ופעולות ראשוניות  \* זיהוי  \* פעולות מידיות  \* שמירת סל"ד  \* בד"ח |  | [ ] | תקלות רוטור זנב  # אבדן דחף  # דוושות תקועות  \* זיהוי  \* פעולות ראשוניות  \* התארגנות  \* נחיתה |
| --- | --- | --- | --- | --- | --- |
|  | [w] | כניסה לעננים  # מצבים שונים  \* זיהוי  \* פעולות מידיות  \* התארגנות  \* ניהול קשר |  | [ ] | אש באוויר  \* זיהוי  \* פעולות מידיות  \* בד"ח חרום |
|  | [w] | נחיתה במישור משופע במאפייני HEMS  \* בחירת המשטח והתייחסות לכלל שיקולי הבטיחות הנדרשים  \* טכניקת נחיתה  \* זיהוי נקודות תורפה בטיחותיות לאחר נחיתה |  | [ ] | נחיתה על משטח מוגבה, עבור טייס כשיר |
| **הערות**: | | | | | | |
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## Appendix 2 – Route/aerodromes qualification knowledge check form.

**טופס מבחן נתיב שנתי**

| שם הנבחן/רשיון: | | | תאריך ביצוע:  תאריך קובע: | סוג מסוק/רישום: | | |
| --- | --- | --- | --- | --- | --- | --- |
| תוקף תעודה רפואית: | | | זמן טיסה: | נתיב שבוצע: | | |
| שם הבוחן/רשיון: | | | תוצאות:  **עבר / נכשל** | חתימת הבוחן: | | |
| \* נושא נבדק # מצב טיסה [ ] תרגול מחייב [w] תרגול לא מחייב [T] לפי סוג מסוק | | | | | | |
| טרום טיסה | | | | | | |
|  | [ ] | בדיקות חיצוניות | |  | [ ] | מרשה טיסה |
|  | [ ] | מסמכים | |  | [ ] | ציוד טיסה |
|  | [ ] | מזג אוויר ונוטאם | |  | [ ] | תעודות אישיות |
| טיסת נתיב | | | | | | |
|  | [ ] | קבלת משימה | |  | [ ] | התנהלות בנתיבים  \* ניהול קשר |
|  | [ ] | תכנון והכנה  \* נתיב  \* דלק | |  | [ ] | התנהלות בשדה תעופה  \* הבנת תמונה אווירית  \* קשר |
| הערות: | | | | | | |
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## [Appendix 3 – HEMS and Elevated helipads presentations](about:blank) (Link)