GHANA CIVIL AVIATION (AERODROMES) DIRECTIVES



PART 26

SECTION I – REGISTRATION OF SURFACE AND ELEVATED HELIPORTS

NOVEMBER 2018

PART 14 - Design and Operations of Aerodromes

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SUBPART A - GENERAL

26.1 APPLICABILITY

- (1) This section of Part 26 of the GCAD applies to all surface and elevated helicopter landing sites used for the landing and taking-off by civil helicopters.
- (2) This section does not apply in respect of a military heliport.

26.2 DEFINITIONS

- (a) The following definitions apply in this Subpart.
 - (1) **Applicable heliport standard.** A means the standard that is applicable to a heliport or to a part of it, or to its administration and operation, as determined under subsection 26.9 (a).
 - (2) **Air taxiway.** A defined path on the surface established for the air taxiing of helicopters.
 - (3) Declared distances heliports.
 - (i) Take-off distance available (TODAH). The length of the final approach and take-off area plus the length of helicopter clearway (if provided) declared available and suitable for helicopters to complete the takeoff.
 - (ii) Rejected take-off distance available (RTODAH). The length of the final approach and take-off area declared available and suitable for performance class 1 helicopters to complete a rejected take-off.
 - (iii) Landing distance available (LDAH). The length of the final approach and takeoff area plus any additional area declared available and suitable for helicopters to complete the landing manoeuvre from a defined height.
 - (4) **Elevated heliport.** A heliport located on a raised structure on land.
 - (5) **Final approach and take-off area (FATO).** A defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by performance class 1 helicopters, the defined area includes the rejected take-off area available.
 - Note.— In respect to the World Geodetic System 1984 (WGS-84) defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.
 - (6) **Forced Landing:** Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface or, of no significant damage to property.
 - (7) **Geoid undulation.** The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.
 - (8) **Heliport Classification**. The categorization of Non-instrument heliports into three (3) classes in terms of obstacle environments and availability of emergency landing areas:
 - (i) **H1 heliports** have *no available emergency landing areas within 625 m from the FATO* and are **restricted for use by multi-engined** helicopters capable of remaining 4.5 m above all obstacles within the defined approach/departure pathways when operating with one engine inoperative and in accordance with

- their aircraft flight manual (AFM).
- (ii) **H2 heliports** have available emergency landing areas within 625 m from the FATO; however, due to high obstacles within the approach/departure pathways, the associated approach slopes are higher, **requiring the use of multi-engined helicopters**.
- (iii) **H3 heliports** have available emergency landing areas within 625 m from the FATO and there are no obstacles that penetrate the obstacle limitation surfaces, and as such, **may be used by single- or multi-engined helicopters**.
- (9) **Helicopter clearway.** A defined area on the ground or water under the control of the appropriate authority, selected and/ or prepared as a suitable area over which a performance class 1 helicopter may accelerate and achieve a specific height.
- (10) **Helicopter ground taxiway.** A ground taxiway for use by helicopters only.
- (11) **Helicopter stand.** An aircraft stand which provides for parking a helicopter and, where air taxiing operations are contemplated, the helicopter touchdown and lift-off.
- (12) **Heliport.** An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.
- (13) **Heliport certificate.** Means a certificate issued under section 26.5 or 26.8.
- (14) **Heliport closed marking**. Means a marking that meets the requirements of subsection 26.23(a).
- (15) **Heliport operations manual or "HOM".** Means the manual referred to in sections 26.30 to 26.34 and includes any amendments to the manual that are approved pursuant to subsection 26.5 (d).
- (16) **Movements**. Each helicopter take-off or landing.
- (17) **Performance Class**. A rating of helicopter operations based on performance requirements considering difficulty of environment and ability of aircraft to either continue flight or safely land without causing harm or damage to people and property on ground.
 - (i) **Performance Class 1:** Performance Class 1 operations are those with performance such that, in the event of failure of the critical power unit, the helicopter is able to land within the rejected take-off distance available or safely continue the flight to an appropriate landing area, depending on when the failure occurs.
 - (ii) **Performance Class 2:** 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 flight, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which cases a **forced landing** may be required.
 - (iii) **Performance Class 3:** A Performance Class 3 operation are those operations such that, in the event of a power unit failure at any time during the flight, a forced landing may not be required in a multi-engine helicopter but will be required in a single engine helicopter.

Note. — Multi engine helicopters can be operated in all Performance Classes. Single engine aircraft cannot conduct performance classes 1 and 2 operations due performance capabilities required in difficult or hostile environments.

- (18) **Obstacle.** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.
- (19) **Safety area.** A defined area on a heliport surrounding the FATO which is free of obstacles, other than those required for air navigation purposes, and intended to reduce the risk of damage to helicopters accidentally diverging from the FATO.
- (20) **Surface level heliport.** A heliport located on the ground or on the water.
- (21) **Touchdown and lift-off area (TLOF).** A load bearing area on which a helicopter may touchdown or lift off.

26.3 MANAGEMENT AGREEMENT

No heliport operator shall manage another heliport operator's heliport unless they are authorized to do so in the heliport operations manual of the other operator's heliport.

SUBPART B — CERTIFICATION

26.4 GENERAL REQUIREMENTS

- (a) No person shall operate the following helicopter landing site unless a heliport certificate is issued in respect of the heliport and the person complies with the requirements of the heliport certificate and operates the heliport in accordance with the heliport operations manual:
 - (1) that is located within a built-up area of a city or town;
 - (2) that is used by an air operator providing a scheduled air service for the purpose of transporting persons;
 - (3) for which an instrument approach procedure to precision limits is established in accordance with the applicable heliport standard; or
 - (4) that is any other heliport in respect of which the issuance of a heliport certificate would be in the public interest and would further the safe operation of the heliport.
 - (5) that is being used for ab initio pilot training must operate from certified heliport.
- (b) For certain helicopter 'special events' which attract large numbers of movements, estimated at over 100 per day, an accountable person for the heliport shall apply for a limited aerodrome certificate appropriate for the scope and scale of planned helicopter activity to be issued by the GCAA.
- (c) Application made in respect of special event specified in paragraph 26.4(b) shall be made at least 90 working days prior to the event.
- (d) Application as minimum shall meet the requirements of subsection 26.5.

26.5 APPLICATION AND ISSUANCE OF A HELIPORT CERTIFICATE

- (a) An applicant for a heliport certificate shall:
 - (1) submit to the Director General the application;
 - (2) ensure that the heliport meets the certification requirements and criteria set out in these Regulations and the applicable heliport standard;
 - (3) submit to the Director General for approval their copy of a proposed heliport operations manual that describes the manner in which the heliport meets the requirements and criteria referred to in paragraph (b) and the physical specifications of the heliport; and
 - (4) submit to the Director General proof that the applicant has consulted with the local government authority relating to the proposed heliport and adjacent land in accordance with the requirements of the applicable heliport standard.

- (5) submit to the Director General for acceptance their safety management system manual that describes the manner in which operational risks will be managed
- (b) The Director General shall, after receipt of an application for a heliport certificate, issue the certificate if the applicant demonstrates to the Director General the ability:
 - (1) to maintain an organizational structure in accordance with the requirements of their heliport operations manual;
 - (2) to maintain an operation of aviation activities at the heliport that ensures the operational requirements set out in their heliport operations manual are met; and
 - (3) to conduct operations at the heliport in a safe manner.
- (c) For the purposes of subsection (b), an applicant shall have:
 - (1) an organization capable of exercising heliport operational management; and
 - (2) operational support services and equipment that are in accordance with their heliport operations manual.
- (d) If a heliport does not meet a requirement set out in the applicable heliport standard, the Director General may specify replacement conditions to be included in the heliport operations manual that relate to the same subject matter as the unmet requirement and that are necessary to achieve a level of safety that is equivalent to the one established by the requirement to protect the public interest and to ensure aviation safety.

26.6 CONTENTS OF A HELIPORT CERTIFICATE

- (a) A heliport certificate shall contain the following information:
 - (1) the certificate number;
 - (2) the name of the heliport;
 - (3) the name of the heliport operator;
 - (4) the signature of the Director General; and
 - (5) the date of issue.

26.7 GENERAL CONDITIONS OF A HELIPORT CERTIFICATE

- (a) The holder of a heliport certificate shall ensure that the heliport meets the applicable certification criteria set out in these Regulations and in the applicable heliport standard.
- (b) The holder of a heliport certificate shall:
 - (1) maintain the organizational structure referred to in paragraph 26.5(a)(b); and
 - (2) notify the Director General within 30 working days before any change in its legal name, trade name or managerial personnel under paragraph 26.5(a).
 - (3) The holder of a heliport certificate shall conduct operations at the heliport in a safe manner.

26.8 INTERIM HELIPORT CERTIFICATE

(a) The Director - General may issue a temporary heliport certificate in writing to an applicant referred to in section 26.5 authorizing them to operate a heliport, until the day of issuance of the heliport certificate that will be issued to the applicant as soon as the application procedure in respect of the issuance is completed; and

- (b) A temporary heliport certificate expires on the earlier of:
 - (1) the day on which the heliport certificate or the amended heliport certificate is issued, and
 - (2) the day specified in the temporary heliport certificate as the day on which it will expire.
- (c) Except for sections 26.5 and 26.6, this Subpart applies in respect of a temporary heliport certificate in the same manner as it applies in respect of a heliport certificate.

SUBPART C— OPERATOR OF A HELIPORT

26.9 OBLIGATIONS OF AN OPERATOR

- (a) The operator of a heliport shall comply with the requirements with respect to the heliport as a whole, the heliport standards as published by the Ghana Civil Aviation Authority.
- (b) The operator of a heliport shall:
 - (1) review each aeronautical information publication as soon as possible after its issuance and immediately after the review notify the Director General and the provider of aeronautical information services of any inaccurate information contained in the publication that pertains to the heliport that they operate;
 - (2) notify the provider of an aeronautical information publication before any planned change to the heliport, the heliport facilities or the level of service at the heliport that would affect the accuracy of information contained in the publication;
 - (3) ensure that the notification is in accordance with the processes and procedures established by the provider of the aeronautical information services.
 - (4) notify the provider of aeronautical information services of all changes to operational information published in the aeronautical information publications; and
 - (5) notify the Director General in writing of any change in heliport operations within 14 working days after the day of the change and take the following measures, as applicable:
 - (i). if a hazardous condition has been identified, issue a NOTAM identifying the hazard, and
 - (ii). if a change in heliport operations constitutes a change to the provisions identified in the heliport certificate, ensure that the change has been approved by the Director General.
- (c) Subject to subsection (d), the operator of a heliport shall give to the Director General, and cause to be received at the appropriate air traffic control unit or Director General, immediate notice of any of the following circumstances of which the operator has knowledge:
 - (1) any projection by an object through an obstacle limitation surface relating to the heliport;
 - (2) the existence of any obstruction or hazardous condition affecting aviation safety at or in the vicinity of the heliport;
 - (3) any reduction in the level of services at the heliport that are set out in an aeronautical information publication as being provided at the heliport;
 - (4) the closure of any part of the manoeuvring area of the heliport; and
 - (5) any other conditions that could be hazardous to aviation safety at the heliport and against which precautions are warranted.
- (d) Where it is not feasible for the operator of a heliport to cause notice of a circumstance referred to in subsection (3) to be received at the appropriate air traffic control unit or Director General, the operator of the heliport shall give immediate notice directly to the pilots who may be affected by that circumstance.

- (e) Prior to the use of a heliport for helicopter operations, the operator of the heliport shall remove from the surface of the heliport or the surrounding ground over which they have control, any vehicle or other obstruction that is hazardous to aviation safety.
- (f) The operator of a certified heliport shall ensure that a policy of insurance is in force for the operation of the heliport.

26.10 HELIPORT OPERATIONS MANUAL

- (a) The operator of a heliport shall, as soon as possible after the issuance of the heliport certificate:
 - (1) provide the Director General with their copy of the heliport operations manual as approved under paragraph 26.7 (b) and any amendments to the manual approved under paragraph (b)(2); and
 - (2) distribute copies of the applicable portions and amendments to the applicable persons and institutions referred to in the manual.
- (b) The operator of the heliport shall:
 - (1) keep their heliport operations manual up to date; and
 - (2) submit to the Director General for approval any proposed amendment to their heliport operations manual.

SUBPART D — GENERAL CERTIFICATION REQUIREMENTS

26.11 HELIPORT CLASSIFICATION

- (a) The operator of a heliport shall determine the heliport classification in accordance with Heliport Standards in respect of:
 - (1) the classification of non instrument heliports; and
 - (2) performance requirements of helicopters that are expected to use the heliport.

Note.— *See definitions for Heliport class and performance classifications of helicopters.*

26.12 OPERATIONAL LIMITS

- (a) The operator of a heliport shall determine, and record in their heliport operations manual, the heliport operational limitations in accordance with the applicable heliport standard with respect to
 - (1) load bearing strength of the TLOF when required by the applicable heliport standard;
 - (2) the maximum helicopter overall length for which each operational area at a heliport is certified; and
 - (3) the heliport classification as specified in paragraph 26.12 (1) and category as determined in accordance with the applicable heliport standard.
- (b) By virtue of the siting of elevated heliports within congested areas with the associated perceived risk to the Aerodrome building, third parties and to nearby structures, only helicopters with Performance Class 1 capability are permitted to land at or take-off from elevated heliports.
 - (1) The helicopter type, intended to be used, must possess a Flight Manual performance profile demonstrating that, in the event of engine failure occurring at any time during the take-off or landing manoeuvres, the helicopter can safely land back on to the elevated Aerodrome or safely fly away, avoiding all obstacles by a vertical margin of at least 35 feet.

- (2) The minimum acceptable dimensions of an elevated Aerodrome must also be described in the Flight Manual, the Flight Manual Supplement and/or in the Operations Manual for the helicopter type under consideration.
- (3) Elevated heliports which do not conform to the required dimensions should not be considered for use.

26.13 UNITS OF MEASUREMENT

- (a) Unless otherwise specified in the applicable heliport standard, units of measurement used in this Division and in the heliport operations manual shall use the following rounding rules and specified measurement units:
 - (1) elevations to the nearest foot;
 - (2) linear dimensions to the nearest metre;
 - (3) geographic coordinates in latitude and longitude to the nearest second;
 - (4) geographic coordinates measured in accordance with World Geographic System (WGS) 1984;
 - (5) bearings to the nearest degree;
 - (6) water depths, measured in the specified unit expressed, to the nearest foot or metre; and
 - (7) range of tides or water levels, measured in the specified unit expressed, to the nearest foot or metre.

SUBPART E — PHYSICAL CHARACTERISTICS

26.14 REQUIREMENTS

- (a) The operator of a heliport shall ensure that:
 - (1) the heliport has at least one FATO; and
 - (2) no FATO is used to accommodate the manoeuvres of more than one helicopter at a time.
- (b) Subject to subsections (c) to (f), the operator of a heliport shall ensure that the heliport meets the requirements set out in the applicable heliport standard in respect of:
 - (1) FATOs;
 - (2) safety areas;
 - (3) rejected take-off areas, if applicable;
 - (4) helicopter clearways, if applicable;
 - (5) TLOFs, if applicable;
 - (6) taxiways as follows, if applicable:
 - (i). air taxiways,
 - (ii). helicopter ground taxiways,
 - (iii). helicopter ground taxiway shoulders, and
 - (iv). helicopter ground taxiway strips;
- (7) aprons, if applicable; and
- (8) helicopter parking positions, if applicable.
- (c) The operator of a surface-level heliport shall ensure that the heliport meets the special requirements for a surface-level heliport set out in the applicable heliport standard in respect of:
 - (1) TLOFs;

- (2) taxiways; and
- (3) aprons.
- (d) The operator of an elevated or rooftop heliport shall ensure that the heliport meets the special requirements for an elevated or rooftop heliport set out in the applicable heliport standard in respect of:
 - (1) TLOFs;
 - (2) safety nets; and
 - (3) helicopter parking positions.
- (e) The operator of a heliport located on an aerodrome primarily designed to serve aeroplanes shall ensure that the heliport meets the special requirements for a heliport located on an aerodrome set out in the applicable heliport standard in respect of:
 - (1) application of additional standards regarding aerodromes;
 - (2) FATOs;
 - (3) ground taxiway separation distances;
 - (4) taxi-holding positions;
 - (5) aprons; and
 - (6) helicopter parking positions.
- (f) The operator of an H1 heliport shall ensure that the heliport meets the special requirements for an H1 heliport set out in the applicable heliport standard in respect of FATOs and TLOFs.

SUBPART F — OBSTACLE LIMITATION SURFACES

26.15 REQUIREMENTS

- (a) Subject to subsections (b) to (d), the operator of a heliport shall establish the following obstacle limitation surfaces in accordance with the applicable heliport standard for a non-instrument, non-precision or precision FATO and meet the special requirements for the surfaces and any obstacles that may affect them, set out in the applicable heliport standard:
 - (1) approach surfaces;
 - (2) take-off surfaces; and
 - (3) transitional surfaces.
- (b) The operator of an H1 heliport shall ensure that the heliport meets the special requirements for obstacle limitation surfaces for non-instrument FATOs set out in the applicable heliport standard for an H1 heliport in respect of approach or take-off surfaces.
- (c) The operator of an H1 heliport shall conduct a survey of the approach and take-off surface to determine obstacle information and submit a copy to the Director General at the time of the initial heliport certification and after that at least once every five years, unless no new obstacle has been established in the approach and take-off surface during the five-year period and a report to that effect is made to the Director General.
- (d) The operator of an H2 heliport shall ensure that the heliport meets the special requirements for obstacle limitation surfaces for non-instrument FATOs set out in the applicable heliport standard for an H2 heliport in respect of approach or take-off surfaces.
- (e) The operator of a heliport equipped with an instrument FATO shall ensure that the heliport meets the special requirements for obstacle limitation surfaces for instrument

FATOs set out in the applicable heliport standard.

SUBPART G — VISUAL AIDS FOR AIR NAVIGATION

26.16 MARKING

- (a) The operator of a heliport shall equip the heliport with at least one wind direction indicator and meet the requirements for wind direction indicators set out in the applicable heliport standard.
- (b) The operator of a heliport shall meet the requirements for heliport markings set out in the applicable heliport standard in respect of
 - (1) heliport identification marking;
 - (2) in the case of a hospital heliport, hospital heliport identification marking;
 - (3) an aiming point marking for each FATO;
 - (4) FATO edge marking;
 - (5) a FATO designation marking for each FATO;
 - (6) a FATO centre line marking for each FATO;
 - (7) approach and take-off direction indicator marking;
 - (8) a TLOF edge marking for each TLOF;
 - (9) the maximum allowable helicopter weight marking for each TLOF;
 - (10) the following taxiway markings:
 - (i). taxiway centre line marking,
 - (ii). taxiway holding position marking, and
 - (iii). taxiway edge marking;
 - (11) where the apron edge is not easily identifiable, an apron edge marking;
 - (12) where a helicopter parking position is provided, a helicopter parking position marking;
 - (13) where a helicopter parking position is provided and helicopters are required to have a specific alignment on the parking position, an alignment marking;
 - (14) where a helicopter parking position is not large enough for the largest helicopter for which the heliport is designed or where the size of the parking position is limited by the minimum separation requirement to an obstacle or an adjacent parking position, a helicopter parking position information marking; and
 - (15) where passengers are required to walk on a specific path on an apron between a helicopter parking position and the passenger terminal, an apron passenger path marking.

26.17 LIGHTS

- (a) The operator of a heliport shall extinguish, screen or otherwise modify a ground light, other than an aeronautical ground light, that may cause confusion to heliport users within the heliport boundary or other spaces within the boundaries of the control of the heliport operator.
- (b) The operator of a heliport shall meet the requirements set out in the applicable heliport standard in respect of the installation of:
 - (1) elevated approach lights;
 - (2) elevated lights for operational areas;
 - (3) inset lights;
 - (4) light intensity and control; and
 - (5) a heliport beacon.

- (c) The operator of a heliport equipped with a non-instrument FATO that is certified to be available for use at night shall provide an approach and take-off direction light that meets the requirements set out in the applicable heliport standard where:
 - (1) at least one approach and departure path is required to be indicated to pilots; or
 - (2) obstacle clearance, noise abatement or air traffic control procedures require that a specific direction be flown.
- (d) The operator of a heliport shall provide a visual approach slope indicator system that meets the requirements set out in the applicable heliport standard where:
 - (1) there are inadequate visual references;
 - (2) obstacle clearance, noise abatement or air traffic control procedures require that a particular slope be flown; or
 - (3) the surrounding terrain may produce misleading information.
- (e) Where a heliport approach path indicator or an abbreviated heliport approach path indicator is provided at a heliport, the visual approach slope indicator system shall meet the general design requirements and specific requirements set out in the applicable heliport standard.
- (f) The operator of a heliport shall monitor the visual approach slope indicator system provided at a heliport in accordance with the requirements of the applicable heliport standard.
- (g) Where a visual approach slope indicator system is provided, the operator of a heliport shall provide, when required, an obstacle protection surface (OPS) in accordance with the applicable heliport standard.
- (h) The operator of a heliport shall provide FATO lights that meet the requirements of the applicable heliport standard for:
 - (1) a surface-level heliport unless the FATO and the TLOF are coincidental or the extent of the FATO is self-evident;
 - (2) an instrument FATO; and
 - (3) where an illuminated TLOF is not provided, a FATO that is certified to be available for use at night unless the FATO edge marking is clearly visible to heliport users by means of external floodlighting.
- (i) Where a TLOF is not located within a FATO that is certified to be available for use at night, the operator of a heliport shall ensure the aiming point is illuminated in accordance with the applicable heliport standard.
- (j) The operator of a heliport shall provide TLOF lights consisting of perimeter lights, floodlights or luminescent panels for a TLOF that is certified to be available for use at night and, if the perimeter of the TLOF is not coincidental with that of the FATO, in accordance with the requirements of the applicable heliport standard.
- (k) Where a rejected take-off area is established for a surface-level heliport that is certified to be available for use at night, the operator of a heliport shall provide in that area rejected take-off area lights in accordance with the requirements of the applicable heliport standard.
- (I) The operator of a heliport shall provide taxiway centre line lights in accordance with the requirements of the applicable heliport standard for a taxiway that is used in runway visual range conditions of less than 1200 feet or in conditions of ground visibility of less than one-quarter statute mile.
- (m) The operator of a heliport shall provide taxiway edge lights in accordance with the requirements of the applicable heliport standard for a taxiway that is available at a

- heliport that is certified to be available for use at night and that is not provided with taxiway centre line lights.
- (n) Where an apron is available at a heliport that is certified to be available for use at night, the operator of the heliport shall provide apron edge lights, retro-reflective edge markers or apron floodlighting in accordance with the requirements of the applicable heliport standard.

26.18 MARKERS

- (a) The operator of a heliport shall ensure that the markers installed at the heliport are either flush mounted or lightweight and frangibly mounted and in accordance with the requirements of the applicable heliport standard.
- (b) The operator of a heliport shall provide FATO markers where:
 - (1) a FATO edge marking is not provided; and
 - (2) where the extent of the FATO and the adjacent ground is not self-evident.
- (c) The operator of a heliport shall provide ground taxiway edge markers in accordance with the requirements of the applicable heliport standard if the helicopters must travel along a ground taxiway to or from a FATO to an apron, unless:
 - (1) the edges of the taxiway are self-evident;
 - (2) taxiway centre line lights are provided;
 - (3) taxiway edge lights are provided; or
 - (4) taxiway centre line markers are provided.
- (d) The operator of a heliport shall provide air taxiway markers if the helicopters must travel by air to or from a FATO to an apron via a specific corridor in accordance with the applicable heliport standard.

SUBPART H — VISUAL AIDS FOR DENOTING OBSTACLES

26.19 REQUIREMENTS FOR MARKING OR LIGHTING OBSTACLES

- (a) Subject to subsection (d), the operator of a heliport shall ensure that obstacles, other than aircraft, on the movement, manoeuvring and safety areas of the heliport are marked and lighted as follows:
 - (1) vehicles and other mobile obstacles on the movement area shall be marked so as to be visible to pilots during aircraft operations;
 - (2) where the heliport is used at night or in conditions of low visibility, vehicles and other mobile obstacles on the manoeuvring area shall be lighted;
 - (3) elevated aeronautical ground lights on the movement area shall be marked so as to be conspicuous by day; and
 - (4) in accordance with the applicable heliport standard, a fixed obstacles located on the safety area shall be:
 - (i) marked, and
 - (ii) where the heliport is certified to be available for use at night, lighted.
- (b) The operator of a heliport shall mark and, if the heliport is certified to be available for use at night, light fixed obstacles located within the area identified in the applicable heliport standard, except where the obstacle is:
 - (1) shielded by another fixed obstacle that is marked in accordance with heliport standard
 - (2) conspicuous;
 - (3) identified in an aeronautical evaluation as being sufficiently lit by ambient light at night; or

- (4) not more than 150 m above the adjacent ground and lighted in accordance with heliport standard.
- (c) The operator of a heliport where a fixed obstacle that is more than 150 m above the surrounding ground is located within the area identified in the applicable heliport standard shall:
 - (1) light the obstacle by high-intensity obstacle lights by day in accordance with heliport standard; or
 - (2) mark the obstacle in accordance with the applicable heliport standard.
 - (3) The operator of a heliport shall mark an elevated obstacle on the helicopter ground taxiway strips and, where the heliport is certified to be available for use at night, light the obstacle.
- (e) The operator of a heliport shall mark an obstacle referred to in subsection (b) except if an aeronautical evaluation determines that:
 - (1) the obstacle is conspicuous because of its shape, dimensions or colour; or
 - (2) retro-reflective tape or markers are sufficiently conspicuous to be used instead of lights.

26.20 MARKING OBSTACLES

- (a) The operator of a heliport shall ensure that a fixed obstacle or a mobile obstacle on the heliport is marked in accordance with the requirements of the applicable heliport standard.
- (b) Obstacles required to be marked shall, in accordance with applicable heliport standard be
 - (1) coloured;
 - (2) marked by markers; or
 - (3) marked by flags.

26.21 LIGHTING OBSTACLES

- (a) The operator of a heliport shall light a fixed obstacle in accordance with applicable heliport standard.
- (b) The operator of a heliport shall ensure that maintenance and service vehicles in use display lights in accordance with the requirements of the applicable heliport standard.
- (c) The operator of a heliport shall ensure that emergency vehicles in use that are required to be lighted display the lights specified in the applicable heliport standard.

SUBPART I — VISUAL AIDS FOR DENOTING RESTRICTED USE AREAS

26.22 REQUIREMENTS

- (a) When a FATO, helicopter parking position, taxiway, or any part of those areas is permanently closed, the operator of a heliport shall display a closed marking on the area that meets the requirements of the applicable heliport standard.
- (b) When an area of a heliport is temporarily closed, the heliport operator shall ensure that:
 - (1) notice of the closure is:
 - (i) included in the Aeronautical Information Publication, or

- (ii) reported in a NOTAM; or a closed marking referred to in subsection (a) is displayed on the affected area.
- (c) The operator of a heliport shall ensure that non-load-bearing surfaces adjacent to a FATO, helicopter parking position or taxiway that cannot be visually distinguished from load-bearing surfaces are marked as set out in the applicable heliport standard.
- (d) The operator of a heliport shall ensure that unserviceability markers consisting of flags, cones or marker boards that meet the requirements of the applicable heliport standard and are positioned in conformity with that standard are displayed on any part of a taxiway or apron that is unfit for the movement of aircraft.
- (e) The operator of a heliport shall ensure that unserviceability lights that meet the requirements of the applicable heliport standard are displayed in conformity with that standard wherever any portion of a taxiway or apron at a heliport that is certified to be available for use at night is unfit for the movement of aircraft.

SUBPART J — EQUIPMENT AND INSTALLATIONS

26.23 REQUIREMENTS

- (a) The operator of a heliport shall ensure that the lights of a visual approach slope indicator system, when required and installed as specified in subsection 26.17(d), are aligned by means of:
 - (1) a daily inspection of alignment and, if necessary, a correction of any misalignment of more than 3 minutes of arc; or
 - (2) an automatic shut-off switch installed in the system.
- (b) The operator of a heliport shall ensure that a fence or other barrier is installed on the heliport and that the fence or other barrier meets the requirements of the applicable heliport standard.
- (c) The operator of a heliport or a person under the operator's authority shall direct any vehicle that is operated on an apron or manoeuvring area of the heliport or, in the case of a vehicle in a manoeuvring area, shall ensure that the vehicle's operation is under the direction of the air traffic services unit or the heliport operator or a person working under their authority, in accordance with the requirements of the applicable heliport standard.
- (d) The operator of the heliport shall ensure that the drivers of vehicles on an apron or manoeuvring area are trained for the tasks to be performed and that they know they must comply with instructions issued by the air traffic services unit or the heliport operator or a person working under their authority.
- (e) The operator of a heliport shall ensure that equipment required for air navigation purposes that is located on a safety area, a taxiway strip or within the separation distances specified in the applicable heliport standard is located, constructed and installed in accordance with that standard.
- (f) The operator of a heliport shall ensure that visual aids, precision approach FATO lights and centre line lights on a taxiway are maintained in accordance with the applicable heliport standard.

SUBPART K — EMERGENCY AND OTHER SERVICES

- (a) The operator of a heliport shall develop and have available a heliport emergency response plan at the heliport.
- (b) The operator of a heliport shall identify in the emergency response plan those organizations that are capable of providing assistance in responding to an emergency at the heliport or in its vicinity.
- (c) The operator of a heliport shall specify in the emergency response plan the procedures to be followed for:
 - (1) an aircraft crash or other accident within the heliport perimeter;
 - (2) an aircraft crash outside the heliport perimeter; and
 - (3) any medical emergency.
- (d) Where an approach and departure path at a heliport is located over water, the operator of the heliport shall specify in the emergency response plan:
 - (1) the organization that is responsible for co-ordinating rescue in the event of an aircraft ditching; and
 - (2) how to contact that organization.
- (e) The operator of a heliport shall include in the emergency response plan the information required in accordance with applicable Heliport Standards.
- (f) The operator of a heliport shall consult with all organizations identified in the emergency response plan concerning their role in it.
- (g) The operator of a heliport shall annually review the emergency response plan and update the information.
- (h) The operator of a heliport that provides a scheduled service for the transport of passengers shall carry out a test of the emergency response plan at intervals not exceeding three years.

26.25 FIRE PROTECTION SERVICES

- (a) The operator of a surface-level heliport or of a heliport over a parking garage or on an elevated structure that is not an occupied building shall ensure that fire protection services are provided at the heliport and that those services and the fire resistance of the structure meets the requirements of the applicable heliport standard.
- (b) The operator of a rooftop heliport shall ensure that fire protection services are provided at the heliport and that those services and the fire resistance of the structure meets the requirements of the applicable heliport standard.

26.26 EXTINGUISHING AGENTS AND EQUIPMENT

- (a) The operator of a heliport shall:
 - (1) determine the requirements for extinguishing agents and equipment used for fire protection at the heliport based on the longest dimension helicopter for which the heliport has been certified;
 - (2) ensure that the agents and equipment are in accordance with the applicable heliport standard; and
 - (3) provide a fire extinguisher or fire fighting system that is protected from freezing.

26.27 TRAINING OF RFFS PERSONNEL

(a) All personnel shall receive RFFS training prior to initial participation and periodically thereafter. Training syllabus shall include the following:

- Chemistry of combustion.
- Extinguishing agents methods of application and use.
- First Aid/fire extinguishers.
- Fire Hose.
- Fire appliances & equipment selection, storage, handling, use, inspection & testing, maintenance, record keeping.
- Personal Protective Equipment.
- Helicopter construction.
- Helicopter type familiarisation.
- Response area topography
- Tactics and techniques appliance positioning, external/internal fires, access, forcible entry, assistance with evacuation.
- First Aid.
- Casualty handling.
- Emergency planning.
- Theoretical and practical, written and oral assessment.

Notes:

- 1. Instructors will need to vary the syllabus to suit local requirements and specific equipment provided.
- 2. The end result must be an organised trained unit to provide the necessary cover, with emphasis on practical use of equipment available at the particular aerodrome. The training sessions must include actual fuel fire situations.
- 3. It is recommended that the above programme be modified for recurrent periodic training. The first bullet point can be omitted and personnel should participate as a team comprising of the individual members forming the crew.
- (b) Details of training syllabuses and specified periodic re-training requirements must be contained in the operations manual.
- (c) Assessment of the competency of the person(s) determining, evaluating and conducting the training shall be the responsibility of the operator. The Authority may request details of assessments.
- (d) All personnel must receive appropriate periodic training in the use of the specific rescue and fire fighting equipment provided. Such training should include a full operational exercise.
- (e) All personnel must receive appropriate periodic training in first aid to enable them to provide immediate assistance in the event of an accident.
- (f) Aircraft familiarisation on the aircraft types planned to use the site must form an integral part of personnel training. Methods of door operation, emergency exit and seat harness release are important aspects of such training. Records, on a personal basis, of all practical and technical instructions are to be maintained and retained by the operator for a minimum of two years.

26.28 RFFS PERSONNEL LEVELS

- (a) Not less than two trained persons for Category H1, and three for Category H2 shall be available for RFFS duties. Regard must be given to the arduous nature of RFFS activities. Personnel selected for these duties are to be free from any physical disability which may impair their performance or which may be aggravated by prolonged exertion. RFFS personnel must have at least average strength to enhance their physical powers during a rescue.
- (b) The actual number of trained personnel may need to be increased following a risk

- assessment of the requirement for a specific operation.
- (c) At surface level aerodromes, the minimum number of trained personnel as quoted in subparagraph (a) above must be supplemented by at least one person with the responsibility for passenger/crowd marshalling during normal operational and emergency situations. Such person will also be responsible for alerting, and liaison with, local RFFS.
- (d) At elevated aerodromes, determination of the total number of personnel required for safe management of RFFS and for passenger handling is to be the subject of a safety case. The total number of personnel will be dependent upon the specific type of RFF equipment in use.

26.29 RESPONSE TIME AND RESPONSE AREA

- (a) Response time is considered as the time between the receipt by the RFFS of the initial call and the first effective intervention at the accident by RFFS personnel.
- (b) At surface level aerodromes the operational objective of the RFFS should be to achieve a response time not exceeding two minutes in optimum conditions of visibility and surface conditions. This response must be achievable by personnel appropriately dressed.
- (c) At elevated aerodromes the response time should be considerably less than two minutes.
- (d) The response area includes all of the areas used for the manoeuvring, landing, takeoff, rejected take-off, taxiing, air taxiing and parking of aircraft.

26.30 VEHICLE

- (a) Unless special circumstances dictate such as described in subparagraph (b) under this section, a suitably equipped vehicle shall be provided and be readily available for immediate use to carry personnel and RFF equipment to the scene of an accident/incident. Non self propelled appliances (trailers) are permissible but they must be connected to a suitable towing vehicle whilst aircraft movements are taking place. A vehicle carrying bulk flammable material is not suitable for either purpose.
- (b) Where soft or other difficult terrain is immediately adjacent or comprises part of the Aerodrome response area, a suitable all wheel drive vehicle will be required in order to ensure an effective response. In other situations the vehicle must be suitable for the terrain at the specific site. At confined area aerodromes, alternatives to the provision of a vehicle may be required. These may be on the lines of fixed systems such as those used for elevated aerodromes.
- (c) For night operations permitted by the GCAA, sufficient portable emergency lighting equipment for adequate illumination of an incident site must be provided. This equipment may be carried on the vehicle or by any other suitable means.
- (d) The capability of the available vehicle must be taken into account when surveying any site. If the vehicle in use cannot meet the requirements contained herein and in section 26.29, the site must be deemed unacceptable.

26.31 PERSONAL PROTECTIVE EQUIPMENT

- (a) All RFFS personnel must be provided with personal protective equipment (PPE), i.e. the helmet, tunic and trousers, gloves and the boots..
- (b) Respiratory Protective Equipment (RPE) must be provided on a scale commensurate with the nature of the hazard; for example, consideration must be given to the provision of face masks where aircraft constructed substantially of composite material are in use.

26.32 RECORDS

- (a) Records of personnel competency and training in RFFS and first aid as well as for equipment and vehicle checks and maintenance logs shall be made and preserved by the operator for two years.
- (b) The person in charge at the Aerodrome should have available, on site, documentation of the records of training and the maintenance status of all equipment in use at the Aerodrome to indicate the appropriateness of the RFFS cover.

26.33 SAFETY PERSONNEL FOR HELIPORT

The operator of surface or elevated heliport shall ensure that a minimum of one trained safety person is in attendance during helicopter operations.

26.34 TRAINING FOR SAFETY PERSONNEL

The operator of a heliport shall provide initial and refresher training to safety personnel provided at the heliport in accordance with the applicable heliport standard.

SUBPART L — HELIPORT OPERATIONS MANUAL

26.35 GENERAL

- (a) The provisions of this Subpart that specify the procedures for making a heliport operations manual also apply in respect of any amendment to the manual.
- (b) The operator of a heliport shall set out in the heliport operations manual
 - (1) the heliport certification standards that were met for issuance of the heliport certificate; and
 - (2) the level and types of services to be provided by the operator of the heliport.
- (c) The operator of a heliport shall operate the heliport in accordance with the heliport operations manual.
- (d) The Heliport Operations Manual shall include the following parts:
 - (i) General Section
 - (i) Part I: Administration
 - (ii) Part II: Heliport Specifications
 - (M) Part III: Airside Services
 - (V) Part IV: Airside Operational Plans and Procedures
 - (M) Appendices

Notes: Appendix I details guidelines for the developments of Heliport Operations Manual acceptable to the GCAA.

26.36 HELIPORT DATA

- (a) The operator of a heliport shall determine and record in the heliport operations manual, the following data in respect of the heliport in accordance with the applicable heliport standard:
 - (1) geographic coordinates for:
 - (i) the heliport reference point if the heliport is not located on an aerodrome that already has a reference point, and
 - (ii) the heliport geometric centre,
 - (iii) the FATO coordinates,
 - (iv) the heliport elevation,
 - (V) the heliport magnetic variation, and
 - (vi) where installed, the electronic navigation aids; and
 - (2) information in respect of
 - (i) the heliport type,
 - (ii) the dimensions, slope and surface type of all TLOFs,
 - (iii) the length, width, slope, category, surface type and designation number of all FATOs,
 - (iv) the length, width and surface type of all safety areas,
 - (V) the designation, width and surface type of helicopter ground and air taxiways,
 - (vi) the apron surface type and description of helicopter parking positions, and
 - (vii) the declared distances for:
 - take-off distance available,
 - rejected take-off distance available, and
 - landing distance available.
- (b) The operator of a heliport shall ensure that a heliport geometric centre is redetermined and recorded in the manual if the physical characteristics of the heliport change because:
 - (1) an existing FATO is closed;
 - (2) the boundaries of an existing FATO are altered; or
 - (3) a new FATO is constructed.
- (c) The operator of a heliport shall report the heliport data specified in paragraph (a)(1) to the Aeronautical Information Services within 14 working days after the Director General's approval.

26.37 FACILITIES AND SERVICES

- (a) The operator of a heliport shall ensure that the following are provided in accordance with the applicable heliport standard and recorded in their heliport operations manual:
 - (1) the applicable physical characteristics set out in section 26.15;
 - (2) the obstacle limitation surfaces set out in section 26.16;
 - (3) the visual aids for navigation set out in section 26.17;
 - (4) the lighting or marking of obstacles set out in section 26.20;
 - (5) the visual aids utilized for denoting restricted use areas set out in section 26.23;
 - (6) the equipment and installations set out in section 26.24; and
 - (7) the emergency response plan set out in section 26.25

26.38 OTHER INFORMATION TO BE PROVIDED

- (a) The manual shall also include the following samples:
 - (1) Pilot Briefing Sheet,
 - (2) Emergency Procedures and Notification Sheets
 - (3) Location Map with Labels
 - (4) Security Policy
 - (5) Safety Management System

SUBPART M — HELIPORT CONDITIONS

26.39 CONSTRUCTION OR ALTERATIONS OF AN EXISTING FACILITY

- (a) Any alteration of an existing facility shall require the operator to notify the GCAA. This notification must be made at least 30 working days prior to the proposed construction or alteration. The Operator must receive approval of the construction or alteration from the GCAA before construction begins.
- (b) Typical types of construction or alteration include, but are not limited to, the following:
 - (1) Heliport expansion.
 - (2) Heliport relocation.
 - (3) Hangar construction.
 - (4) Construction of any type that would meet the requirements for notification as described in parts 14 and 27 of the GCADs.

26.40 NOTICE TO AIRMEN

- (a) The heliport operator is required to notify the GCAA of any circumstance that affects the safe use of the facility by pilots. The subject of the notification will be any planned or unplanned situation of a temporary or long term nature that poses a potential safety hazard to helicopter operating to, from or on the heliport.
- (b) The heliport operator or an Aviation Safety Inspector are the only persons authorized to issue NOTAMS.
- (c) An Aviation Safety Inspector will issue NOTAMS at any heliport where a safety problem is noted during an inspection by contacting the appropriate office (s) of Air Traffic Services (ATS). The NOTAM can be lifted by the heliport operator after corrective action has been taken.

26.41 HELIPORT CLOSURE PROCEDURES.

- (a) Any heliport certified by the GCAA may be closed in one of the following ways:
 - (1) <u>Mandatory Closure</u> Following report of the most recent annual heliport inspection, the Director General is authorized to issue a written "Mandatory Closure Notice" to any heliport operator that fails to maintain the certified heliport within the minimum safety requirements prescribed by this Part. All heliports for which an

operating certificate has been issued must be maintained in a condition that meets or exceeds the minimum safety requirements set forth in this part. A "Mandatory Closure Notice" will be issued if it is reasonably determined by the GCAA that violation(s) of the minimum safety requirements defined by this Part may pose a substantial and continuing threat to the safety of helicopter operating to, from or on the subject heliport. The written notice will contain a specific description of the safety violations giving cause for the closure and the actions that must be taken by the heliport operator to correct each specified violation. Unless otherwise appealed by the heliport operator, the mandatory closure of a heliport will become effective fifteen (15) working days after the date of issuance of the "Mandatory Closure Notice".

- (2) Emergency Closure In consultation with the Director General, an Inspector is authorized to issue an "Emergency Closure Notice" when he or she reasonably determines, by an on-site visit, a condition exists that constitutes a substantial and immediate threat to the safety of helicopters operating to, from or on a heliport. An emergency closure will take effect immediately. Upon a determination that an emergency closure is warranted, the Inspector will, without delay, notify the heliport operator of the observed safety violation(s) and will immediately contact the ATS for the issuance of a closure NOTAM. It will be the heliport operator's responsibility to notify all heliport tenants and users of the closure. Within twenty-four (24) hours of the emergency closure, the Inspector will provide the heliport operator with written verification of the closure action. The written verification will contain a specific description of the safety violations giving cause for the emergency closure and the actions that must be taken by the heliport operator to correct each specified violation. The emergency closure will be rescinded only when the corrective actions have been taken by the heliport operator and verified by the GCAA.
- (3) Voluntary Closure A voluntary closure is an action initiated by the heliport operator. The operator of a certificated heliport may initiate procedures to permanently close a heliport by notifying the GCAA in writing of intent to abandon the site as a heliport. The heliport operator's written notification of voluntary closure must set forth the reasons for closure and the proposed date of closure. It is the heliport operator's responsibility to notify all heliport tenants and known heliport users of the intent to close the heliport and to show proof to the GCAA that such notification has occurred. If the Director General concurs with the request for voluntary closure, the GCAA will notify the heliport operator in writing that the heliport may be temporarily closed pending final approval for permanent closure
- (4) <u>Maintenance/Construction Closure</u> A heliport may be temporarily closed by the heliport operator for the purpose of performing maintenance or construction work that may interfere with the safety of helicopter operating to, from or on the heliport. It is the responsibility of the heliport operator to contact the GCAA for the purpose of issuing a NOTAM about the heliport closure. The heliport operator shall also notify the GCAA in writing about the work to be performed and anticipated beginning and ending dates of the closure.
- (b) A heliport operator may appeal a mandatory or emergency closure within 30 working days after receipt of the order. The heliport shall remain closed during the appeal process.

26.42 PROHIBITED ACTIVITIES

- (a) The use of any portion of the helicopter operations area, or heliport property within the boundaries of the imaginary surfaces of a certificated heliport for any purpose other than the operation of helicopter shall be deemed a non-aeronautical activity and is prohibited. These activities include, but are not limited to, the following:
 - (1) Use of the heliport, taxiway, apron, or any area of heliport property for the flying of a radio controlled model helicopter.

- (2) The discharge of firearms on heliport property except by authorized heliport personnel as required for varmint or bird control.
- (3) The use of heliport property within the Helicopter Operations Area for the seating, or congregating of pedestrians, or the erection of booths for the distribution of goods, food, or beverages.
- (4) The destruction of any part of the helicopter operations area of a certified heliport without the proper notification as described in this part.
- (5) The removal or destruction of any heliport lighting fixtures, directional signs, or navigation equipment without approval of the heliport operator.
- (6) The erection of any structure or planting of vegetation that meets the definition of a heliport hazard.
- (7) The closure of, or limiting of access to, any part of the helicopter operations area for the use of certain groups or individuals. The only exceptions being operations requiring exceptional safety or security as deemed appropriate by the heliport operatorAPPENDIX I HELIPORT OPERATIONS MANUAL DEVELOPMENT GUIDELINES

Note: These guidelines are intended to assist Heliport Operators of any size heliport in meeting regulated requirements. The degree to which the following format is adopted will depend on the size of the heliport and the complexity of the operations.

A heliport can be issued a heliport certificate if the aerodrome is assessed as conforming to the relevant specifications in a Heliport Standards and has an Heliport Operations Manual approved by GCAA. The Heliport Operations Manual (HOM) is prepared by the operator and is intended to inventory the facilities and services maintained at the heliport and to state how the heliport is to be operated. Once approved, it is a requirement of continued certification that the heliport be maintained and operated in accordance with the procedures and specifications contained within the HOM.

The information provided can be brief but must be sufficiently descriptive. Historical details should be limited to those required to explain deviations to the existing Standards. The Heliport Operator must be aware of where the aerodrome fits into the airspace system surrounding the aerodrome. This is so that the operator can be knowledgeable about activities or new construction that may affect access to or operations at the aerodrome. He/she may wish to include a brief description of arrival/departure routes, instrument approaches, company approaches, VFR Terminal Procedures (VTPC), adjacent aerodromes affecting aviation operations, etc.

A comprehensive table of contents is required and will assist in making the HOM a useful working document. The HOM must be packaged in an amendable format, ie. in a three-ring binder.

Because of the necessity of making the manual in an amendable format, important reference information such as the heliport name and document title (Heliport Operations Manual) should be incorporated on each page. The amendment status, i.e. number and/or date must be incorporated on each page to enable an assessment to be made on whether a particular manual is up to date.

The HOM is made up of the following sections:

General Section

A General section consisting of:

The HOM Cover Page

The Heliport

Certificate The HOM

Signature Page The

HOM Foreword

The Amendment Control Section

- i) Amendment Procedures
- ii) Record of Amendments
- iii) List of Manual Holders

Lists of Agreements with other agencies affecting

operations Compliance Statement

The Table of Contents

Part I: Administration

- 1.1 Introduction
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 - 1.1.2 Operating Conditions
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- 12 Operations: General Procedures, Structure and Description of Duties
 - 1.2.1 General Operating Procedures
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 - 1.2.3 Duties and Responsibilities
- 1.3 Heliport Operational Policy
- 1.4 Technical Documents and Drawings
- 1.5 Publications
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Part II: Heliport Specifications

- 2.1 Heliport Reference Data
- 2.2 Heliport Movement Areas
- 2.2.1 Physical Characteristics
- 2.3 Heliport Obstacle Limitation Surfaces
- 2.4 Heliport Visual Aids
- 2.4.1 Wind Direction Indicators
- 2.4.2 Markings and Markers
- 2.4.3 Lightings
- 2.5 Airside Guidance Signs
- 2.6 Special Operations

Part III: Airside Services

- 3.1 Airside Services
- 3.1.1 Airside Maintenance Service
- 3.1.2 Heliport Fire Fighting Service
- 3.1.3 Heliport Condition Reporting
- 3.1.4 Air Navigation Services
- 3.1.5 Air Navigation Facilities

Part IV: Airside Operational Plans and Procedures

- 4.1 Emergency Response Plan
- 4.2 Heliport Safety Plan
- 4.3 Movement Area Access and Control Procedures
- 4.4 Apron Management and Safety Plan
- 4.5 Disabled Aircraft Removal Plan
- 4.6 Wildlife Control Program

- 4.7 Construction and Maintenance Control Procedures
- 4.8 Other Programs

Appendix A: NOTAM Procedures in accordance with Part 26.9 and 26.39.

Appendix B: Copies of Agreements **Appendix C:** Pilot Briefing Sheet,

Appendix D: Emergency Procedures and Notification Sheets

Appendix E: Location Map with Labels

Appendix F: Security Policy

Appendix G: Safety Management System

In using this guideline it is intended that operators will use it like a checklist to customize an HOM that is relevant to their heliport. The guideline generally identifies where certain items are necessary because of a regulatory requirement. Operators are reminded that this guideline is only intended to assist in the preparation of an HOM. Specific HOMs will be required to be in compliance with the Heliport Standards.

Where additional information, guidance, or assistance is sought in the development of an HOM, operators are encouraged to contact the GCAA Safety Regulation Department.

GENERAL SECTION

THE HOM COVER PAGE

The cover page must show:

- The heliport name and certificate number as shown on the certificate.
- The date of publication, ie. the original date of the HOM.

THE HELIPORT CERTIFICATE

The Heliport certificate original or copy is to be placed immediately inside the cover page of the master copy of the HOM. Other copies of the HOM must have a copy of the heliport certificate.

Note: Where the original heliport certificate is not placed in the HOM master copy, it should be displayed in a prominent location. Special versions of the certificate, suitable for framing, are available by contacting your aerodrome certification inspector.

THE HOM SIGNATURE PAGE

The signature page will be produced and provided by the Director - General. The signature page will be inserted in the HOM immediately after the Heliport Certificate.

- (a) The signature page contains certain reference information including a declaration, signed and dated by the operator, in which they agree to fulfill the obligations of the operator referred to in section 26.10 and
 - (i) a statement to be signed by the heliport operator that the manual is complete and accurate and
 - (ii) that the heliport operator agrees to comply with all specifications and conditions contained within the manual.
- (b) A second statement, signed for the Director General, that the heliport operations manual and any amendments to it have been approved,

THE HOM FOREWORD

The HOM foreword should include a statement by the Heliport Operator informing anyone reading the HOM of the purpose of the document.

The following wording is suggested:

FOREWORD

This Heliport Operations Manual (HOM) has been prepared as a condition of certification and forms an integral part of the Aerodrome Certificate. This manual sets out the standards that are met and the services that are provided by the (insert the name of your heliport here) as were required on the date on which the Aerodrome Certificate was issued or as amended from time to time, and serves as:

(a) a legal reference, between the Heliport Operator and the Director - General of GCAA, with respect to the standards, conditions and levels of service to be

maintained for certification;

- (b) a reference document for heliport inspections;
- (c) a reference document for heliport users; and
- (d) a legal instrument to record any approved changes to or deviations from the heliport standards, conditions, or levels of service affecting airside operations.

STANDARDS

Facilities, services, and information specified in this manual are in accordance with heliport standards.

CHANGES TO THE HELIPORT

Where the heliport, portion of the heliport or its facilities are rehabilitated, replaced, refurbished or improved, the applicable specifications of the heliport standards shall apply.

As facilities are progressively refurbished, rehabilitated, or replaced, they will be required to be in compliance with whatever version of the standards that are in effect at the time of the work being performed.

THE AMENDMENT CONTROL SECTION

The heliport manager is responsible for ensuring that the HOM is kept current by developing and issuing amendments. It is his/her further responsibility to establish an effective amendment control procedure and to specify in the HOM how this is to be done.

The amendment control section consists of:

(i) Amendment Procedures

This section provides description of a procedure for amending the manual, and must specify what control procedure will be used by the heliport operator to ensure that all issued HOMs are up to date and complete.

The control procedure should ensure that all amendments will be properly inserted by the person in the position indicated on the distribution list.

- (a) Each page should show the amendment number and date at the bottom of each page.
- (b) When the manual is amended, two copies of the amendment will be forwarded to GCAA along with the amended instructions.
- (c) After approval by GCAA, one copy of the amendment will be retained by GCAA for their manual, and the other signed and returned to the Heliport Operator to be copied and issued to the remaining manual holders.

Corrigenda

Minor changes (ie. phone #, typos) can be accommodated by "pen and ink" amendments without GCAA's prior approval. Distribution of the changes will be the same as above and a record of these changes will be recorded in the corrigenda in the same format as the Record of Amendments.

(ii) Record of Amendments

A copy of any amendments to the manual and the page numbers affected. The record of amendments includes:

- The amendment number
- The date of issue (ie. amendment date)
- The date the amendment was entered into the manual
- The person who amended the manual

(iii) List of Manual Holders

A list of holders of copies of the manual or of portions of it. The list of manual holders includes at least:

- The manual number (ie. Master, No. 1, etc.)
- The title of the position within the organization holding the manual
- The address, telephone number and fax number of the agency holding the manual

(iv) List of Agreements with other agencies affecting operations

Provide listing only here. Copies of detail agreement should be provided as appendix or other associated document.

(v) Compliance Statement

The information necessary to verify that the heliport meets the applicable heliport standard.

THE TABLE OF CONTENTS

The table of contents should be as detailed as required to ensure easy access to information.

PART I - ADMINISTRATION

Information relating to the administration of the heliport including but not limited to:

1.1 INTRODUCTION

The introduction consists of, at least:

1.1.1 Heliport Owner and Operator

The name of the owner, the holder of the aerodrome certificate and the operator. Addresses, telephone numbers and FAX numbers are to be provided.

1.1.2 Operating Conditions

The normal hours and conditions in which the aerodrome is operated, ie. 24 hours, seven days a week, Day/Night, VFR/IFR. Where an instrument approach is provided at the heliport, it should also include the lowest operating visibility at which the heliport will sustain operations.

1.1.3 Maximum Aircraft Overall Length

The maximum overall length of aircraft that the heliport is intended to serve should be

described.

1.1.4 Heliport Operations

A brief description of the heliport (size, location, rooftop, surface level, hospital etc) and its operation (primary use, frequency of use).

1.1.5 Operational Limitations

A reference to any operational limitations applicable to the heliport, ie. night and/or noise abatement procedures, aircraft dimensions, weight, prohibited overflight or specific class of performance.

1.2 OPERATIONS: GENERAL PROCEDURES, STRUCTURE AND DESCRIPTION OF DUTIES

1.2.1 General Operating Procedures

A brief description of the operating procedures of the heliport that include:

- (a) Hours of operation
- (b) Day to day operations (refer to inter-unit agreements, air traffic control, safety and security, etc.)
- (c) Authorities and responsibilities of heliport officials as they inter-relate, ie. emergency response, command and control, after hours procedures and callout, etc. Specific details will be addressed in PART IV- Airside Operational Plans.

1.2.2 Organizational Chart, indicating at least:

- (a) The first level to whom the Heliport Manager reports.
- (b) The Heliport Manager. Where the person holding the position of Heliport Manager has more than one title, both titles must appear on the organizational chart, ie. V/P Plant Operations (Heliport Manager).
- (c) All positions reporting directly to the Heliport Manager through whom the heliport manager directs the activities on the Heliport.

Note: This organizational chart should clearly show the line of authority at the heliport, by including at least the first level of supervision. If the chart goes beyond the first level, it may become unwieldy.

1.2.3 Duties and Responsibilities

A description of duties and responsibilities of all positions shown on the organizational chart. Identify the position(s) responsible for the issuing of a NOTAM. Procedures for the issuing of NOTAMs will be summarized in "Appendix A".

1.3 HELIPORT OPERATIONAL POLICY

This section could alternatively be entitled, RESPONSIBILITIES, OPERATOR OBLIGATIONS, or some other suitable title reflecting the content of this section.

The HOM is required to contain an enumeration of the obligations of the Heliport Operator, as specified in surface and elevated heliport.

The following is an example of an acceptable statement appropriate for all sites.

General Requirements

- (a) _____ Heliport shall be operated in compliance with the standards set out in Heliport Standards.
- (b) Without charge, at the request of a Ghana Civil Aviation Inspector, access to heliport facilities shall be allowed and equipment necessary to conduct an inspection of the heliport shall be provided;
- (c) The heliport shall be inspected as the circumstances require for the purpose of ensuring aviation safety:
 - (i) as soon as practicable after any aircraft accident or incident within the meaning of these terms defined in GCAD Part 19.
 - (ii) during any period of construction or repair of the heliport or of heliport facilities that are designated in the Heliport certificate, and
 - (iii) at any other time when there are conditions at the heliport that could affect aviation safety; and
- (d) Where GCAA is not notified in advance of a change of heliport operations, the Director General shall be notified in writing within 14 working days after the date of any change in heliport operations.

NOTAM Requirements

The Director - General shall be given immediate notice of any of the following circumstances as soon as they become apparent:

- (a) any projection by an object through an obstacle limitation surface relating to the heliport;
- (b) the existence of any obstruction or hazardous condition affecting aviation safety at or near the heliport;
- (c) any reduction in the level of services at the heliport that are set out in the Aeronautical Information Publications;
- (d) the closure of any part of the manoeuvring area of the heliport; and
- (e) any other conditions that could affect aviation safety at the heliport and against which precautions are warranted.

Direct Notice to Pilots

Where it is not feasible to cause notice of any of the circumstance referred to above to be received by the Director - General or an air traffic control unit, notice directly to the pilots who may be affected by that circumstance shall be given.

Movement Area Obstructions

Any vehicle or other obstruction located on the surface of ___(name)__heliport that is likely to be a hazard to aviation at or near the heliport shall be removed.

Undertaking In Respect Of Published Aeronautical Information

On behalf of Heliport, I will undertake to ensure that:

- (a) each issue of relevant Aeronautical Information Publications shall be reviewed upon receipt, and, immediately after such review, the Director General shall be notified of any inaccurate information contained therein that pertains to the heliport; and
- (b) The Director General shall be notified in writing at least 14 working days before any change to the heliport, the heliport facilities or the level of service at the heliport that has been planned in advance and that is capable of affecting the accuracy of the information contained in the aeronautical information publications.

Signed	

1.4 TECHNICAL DOCUMENTS AND DRAWINGS

Pertinent technical documents (such as Heliport Standards) and drawings (such as the location of service lines, as-built blueprints etc.) should be listed, indicating their location.

1.5 PUBLICATIONS

Although it is not a requirement, operators may find it useful to list the aeronautical publications that contain information about the heliport. This is of particular use when mindful of the obligations of the heliport operator with respect to published information.

1.6 COMMITTEES

A list of all airside safety and operational/organizational-type

committees, including: Name of committee Chairperson Purpos e Manda te Frequency of meetings

PART II - HELIPORT SPECIFICATIONS

Section 26.36 lists items of heliport data that must be ascertained and be made available. The Heliport Standard also require that the HOM contain "all information necessary to verify that the heliport meets the applicable standards.

Once certified, a heliport can be maintained in accordance with the heliport standards. Where a deviation to standards is authorized the conditions attached to the deviation must be complied with. Specifying the applicable standard can be done by a general statement at the beginning of the part with exceptions specified separately, or alternatively, with each item.

It is possible to organize this information in a variety of ways. The requirement is that it be complete, accurate, and up to date. This section is also the source of important reference information that is published and needed by the users of the heliport.

The following is an example format and is meant to provide the heliport operator with a check list of data elements which should be listed where applicable.

Note: It is normally assumed that metric units of measurement will be used. If different units of measurement are used, they should be specified. Guidance on units of measurement for heliport data can be found in Section 26.36

2.1 HELIPORT REFERENCE DATA

The operator of a heliport shall determine and record data associated with the heliport. Where this data is required or where it is installed, this information should be inventoried in this section:

- Reference Point (if the heliport is not located on an aerodrome that already has a reference point)
- Geometric Centre (WGS-84 coordinates)
- Heliport Elevation [feet]
- Outer Surface
- Heliport Magnetic Variation (or grivation in the area of compass unreliability)
- Windsock(s) Location
 - describe location with reference to distance from FATO edge or apron
- Electronic Navigation Aids
- Significant Obstacles in the Vicinity of the heliport (Heights in feet above mean sea level)

2.2 HELIPORT MOVEMENT AREAS

Note: A map or chart showing the layout, designation and general features of the aerodrome movement areas would be helpful in this section.

2.2.1 PHYSICAL CHARACTERISTICS

- Final Approach and Take-off Area
 - length (feet)
 - width (feet)
 - slope
 - surface type
 - elevation (feet above mean sea level)
 - coordinates
 - designation number of all FATOs

- Touchdown and Lift-off Area
 - length (feet)
 - width (feet)
 - slope
 - surface type (where applicable)
- Safety Area
 - width
 - surface type
- Rejected take–off area (where provided)
 - length
 - width
 - surface type
 - ground profile
- · Clearway (where provided)
 - length
 - width
 - ground profile
- Declared Distances (26.2 (a) (3)):
 - TODA H(feet)
 - RTODA H(feet)
 - LDAH (feet)
- Bearing strength (elevated and rooftop heliport)

Taxiways

For each taxiway list the following (if applicable):

- Taxiway Designation
- Pavement Width
- Strip Width
- Graded Area

Aprons

For each apron list the following (if applicable):

- Dimensions
- Apron Touchdown Pad(s)

- Dimensions
- Apron Strip

A hand-drawn sketch, diagram, technical drawing or aerial photo of the heliport physical characteristics should be included as an appendix and a reference to that appendix inserted here.

Notes:

- (1) The operator of a heliport shall ensure that a heliport geometric centre is redetermined and recorded in the manual if the physical characteristics of the heliport change because:
 - (a) an existing FATO is closed;
 - (b) the boundaries of an existing FATO are altered; or
 - (c) a new FATO is constructed.
- (2) The operator of a heliport shall report the heliport data specified in paragraph (1)(a) to the Aeronautical Information Services within 14 working days after the Director General's approval of certification.

2.3 HELIPORT OBSTACLE LIMITATION SURFACES

For each surface established, list the following:

- · Approach/take-off surface
 - length
 - distance from FATO edge
 - divergence
 - orientation (in accordance with the magnetic North, except within area of compass unreliability) from the center of the FATO
 - slope
- Transitional surface
 - slope

List also significant Obstacles in the Vicinity of the Aerodrome

2.4 HELIPORT VISUAL AIDS

2.4.1 WIND DIRECTION INDICATORS

Location of wind direction indicators (windsocks)

2.4.2 MARKINGS and MARKERS

- Heliport Identification Marking
- Aiming point Marking (dashed or solid line)
- · Final Approach and Take-off Area Edge Marking
- · Final Approach and Take-off Area Designation Marking
- Final Approach and Take-off Area Centre Line Marking
- Approach and Departure Direction Indicator Marking
- Touchdown and Lift-off Area Edge Marking
- Maximum Allowable Weight Marking
- Information Marking

Taxiways

- Hold Position Marking
- Intersection Marking
- Edge Marking

Aprons

- · Apron edge Marking
- Apron Touchdown Pad (s) Marking
- · Aircraft Touchdown Pad Alignment Marking
- Apron Touchdown Pad Information Marking

A hand-drawn sketch, diagram, technical drawing or aerial photo of the heliport markings should be included as an appendix and a reference to that appendix inserted here.

2.4.3 LIGHTINGS General

- · Heliport Beacon
 - type
 - location
- Hazard Beacon(s)
 - type
 - location
- Windsock(s)
 - location(s) of lighted windsock(s)
- Aircraft Radio Control of Aerodrome Lighting (ARCAL)
 - Frequency
 - Type
 - Special Operating Instructions
- · Obstruction Lighting

Final Approach and Take-off Area/ Touchdown and Lift-off Area

- Final Approach and Take-off Area Edge Lights
- Final Approach and Take-off Area Floodlighting
- · Touchdown and Lift-off Area Edge Lights
- Touchdown and Lift-off Area Floodlighting
- Aiming point lights
- Approach/Departure Direction Lights
- Approach Lighting System (Simple Approach lighting system, Heliport instrument lighting system (HILS))
- Visual Alignment Guidance System
- · Visual Approach Slope Indicator System
- Rejected take-off Area Edge Lights

Taxiways

- Taxiway Edge Lights
- Taxiway/FATO Intersection Lights
- Taxiway/Taxiway Intersection Lights
- Taxiway/Apron Intersection Lights
- · Taxiway Centre Line Lights

Aprons

- Floodlighting
- Edge Lights
- Apron Touchdown Pad(s)

2.5 AIRSIDE GUIDANCE SIGNS

This section includes a complete inventory of airside guidance signs specifying type, location, message content, and means of illumination (if applicable). This can be organized as a table and/or a chart of the movement area(s).

2.6 HELIPORT OPERATIONAL

DATA Operating Minima

- Lowest landing minima; Visibility in statute miles and Runway visual range (RVR) if applicable and Decision Height (DH) or Minimum Descent Altitude (MDA) [feet above mean sealevel]
- Lowest authorized take-off minima; Visibility in statute miles and Runway visual range if applicable.

PART III - AIRSIDE SERVICES

This part inventories all heliport services that are provided on the airside. It is intended that only those services directly related to the operations of the heliport will be listed.

Note: The extent to which these services are provided is proportional to the operational requirements (size and complexity) of each heliport.

Each service or related facility provided requires a description, hours of operation, and the agency providing the service. Copies of all agreements or memoranda of understanding (MOUs) that affect the operations of the heliport, must be attached, or listed and referenced in an appendix.

The following is an example format for specifying the services provided. It is important to note that only those services actually required and/or provided, need be specified.

3.1 AIRSIDE SERVICES

3.1.1 Airside Maintenance Service

Regular scheduled or routine maintenance service including:

- (a) movement area marking (apllicable where the marking could fade rapidly ie. marking on grass).
- (b) grass cutting

3.1.2 Heliport Fire Fighting Service

The heliport fire fighting service is the service provided to respond to occurrences involving aircraft on the airside. These services may be provided at the discretion of the operator or, at some sites, may be required by regulation. The emergency response plan is dealt with in Part IV while this section requires a description of the service provided including:

- (a) type of equipment, capacities, and locations of fire fighting resources.
- (b) hours of operation

3.1.3 Heliport Condition Reporting

This section should specify when the heliport condition is methods used, assessed, how often, the and by whom.

3.1.4 Air Navigation Services

This section includes where applicable:

- (a) Unicom Frequency
- (b) Automated Weather Observation System (AWOS)
- (c) Air traffic control and communication services.
- (e) Aviation Weather Services describe weather services provided.

3.1.5 Air Navigation Facilities

This section includes a listing of facilities provided and the agency responsible. navigation facilities include:

Examples of air

- (a) Non-Directional Beacon (NDB)
- (b) Distance Measuring Equipment (DME)
- (c) VHF Omnidirectional Range (VOR)
- (d) Instrument Landing System (ILS)
- (e) Runway Visual Range (RVR) transmissometers
- (f) Local Area Augmentation System (LAAS)

PART IV - AIRSIDE OPERATIONAL PLANS AND PROCEDURES

As a condition of certification, it is mandatory to develop the following plans and procedures:

- (1) Emergency Response Plan
- (2) Heliport Safety Program
- (3) Movement Area Access and Control Procedures
- (4) Apron Management and Apron Safety Plans

Depending on the size, complexity, and operational objective of the heliport other plans or procedures may need to be developed and should be specified here. An example of this would be operations in low visibility. The following guidance is intended to assist operators in developing the four mandatory plans and to provide examples of other plans that may be included here.

Note: The following guidance is meant to give a brief overview of the requirements, as the complexity and detail of these plans can vary considerably.

4.1 EMERGENCY RESPONSE PLAN

The objective of the Emergency Response Plan (ERP) is to identify those resources that are available to respond to an emergency occurring on the aerodrome airside, and to specify how those resources would be activated, deployed and controlled in response to an airside emergency. The scope of an ERP will vary, commensurate with the size and complexity of the heliport.

Requirements for contingency plans for emergencies that are required as a part of heliport certification are contained in heliport standards.

The following is an example of elements that may be included in your plan where applicable. The first three elements are mandatory:

- (a) Emergency telephone numbers
- (b) Aircraft crash on the heliport or aircraft fire
- (c) Aircraft crash off heliport (including a water rescue plan if appropriate)
- (d) Alert for aircraft emergencies
- (e) Medical emergency
- (f) Structural fire (particularly elevated and rooftop heliport)
- (g) Environmental emergency contingency plan (in case of fuel spills

This plan should also includes the list of the persons of authority and their site roles and the resources available.

4.2 HELIPORT SAFETY PROGRAM

The heliport safety program is primarily a self inspection program that functions as an audit of other plans, procedures, services, facilities, and programs. The purpose of the program is to ensure that the facilities and services provided at the heliport continue to meet the required standard and that the programs, plans, and procedures enumerated elsewhere in this manual are adequate to operate the heliport safely within the scope of its operational mandate.

It is intended that the heliport safety program will promote an awareness of the heliport operational environment so that deficiencies can be quickly identified and rectified.

Although self inspection is the cornerstone of a well developed safety program, operators should consider using other methods such as committees, promotional campaigns, and exercises in developing the safety program.

As a minimum, the following elements should be considered in developing a Heliport Safety Program.

(a) Airside Inspection

The airside must be inspected on a regular basis to ensure that unsafe conditions are identified and action is promptly taken. Regular airside inspection will also serve as program maintenance activities both responsive and preventative. This section should specify which facilities are inspected, how often, and by whom. Elements to consider are:

- FATO/TLOF including:
 - surface condition;
 - safety area condition;
 - presence of contaminants;
 - condition of lighting systems;
 - condition of markings; and
 - presence of obstructions.

Note: New obstructions can arise during construction/maintenance activities.

- taxiways including:
 - taxiway strip condition;
 - pavement condition;
 - condition of taxiway edge and centre line lighting systems;
 - condition of markings; and
 - presence of obstructions.
- aprons including:
 - condition of the surface;
 - aircraft and vehicular traffic; and
 - obstructions, equipment, general cleanliness.
- condition of airside guidance signs (include serviceability of lighting system if applicable)
- approach, FATO/TLOF, taxiway, apron, and obstruction lighting systems including:
 - serviceability and operation;
 - operation of pilot controlled systems; and
 - condition, operation, and alignment of visual guidance systems (VASIS, PAPI, HAPI).
- other visual aids, eg. Markers, wind direction indicators, for condition and serviceability
- · wildlife activity
- movement area FOD
- airfield drainage

(b) Land use control in the heliport vicinity

The presence of objects off-heliport (trees, buildings, cranes, antennas) that are not accounted for may impact on the safe operation of the heliport. Some objects once built, may impose permanent operational penalties on the heliport. To some extent, there may be relief if a zoning regulation has been enacted for the heliport, however it is the operator's responsibility to monitor activity and identify infractions. The

procedures in this section should specify how the construction of permanent obstructions (buildings, antenna/ towers, etc) is to be monitored as well as the procedures for the monitoring of temporary hazards such as cranes.

Some methods and elements to consider are:

- obstacle surveys;
- land development monitoring;
- daily assessment of approach and departure areas (could be part of an airside inspection program detailed above); and
- liaise with municipal planning and zoning committees

(c) Movement Area Access and Control

A heliport safety program should include measures for the monitoring and reassessment of the adequacy of the movement area access and control procedures. This will include assessment of vehicles as well as pedestrians.

(d) FOD Control

Although regular monitoring for the presence of debris that can be ingested into engines, blown by the rotor downwash, or otherwise endanger aircraft and personnel is part of airside self inspection, a program of FOD control is an important part of a heliport safety program. FOD control measures to be considered and included in this section:

- education and awareness measures for the presence and effects of FOD
- disposal sites and bins
- airside cleanliness practices
- · identification of FOD producing activities and practices
- identification of sanctions for those heliport personnel or users that are chronic producers of FOD debris

(e) Construction and Maintenance

Airside construction and maintenance can pose special safety hazards. Control procedures for these activities are dealt with later in this part. What is required in this section is a clear enumeration of who is responsible for monitoring the adequacy of the plan or procedures and to outline measures for the identification and rectification of safety hazards that may arise as a result of these activities. It is also recommended that operators develop an educational or awareness program for personnel who will be participating in construction and /or maintenance activities on the airside. This section should specify a requirement for a safety plan to be developed for each specific construction project.

(f) Apron Safety

A program for the regular or continuous (as appropriate) surveillance and monitoring of activities on apron areas should be established and detailed in this section. Although some items may be dealt with in other sections, such a program should be vigilant for unsafe practices and procedures in respect of:

- aircraft refuelling
- · aircraft and vehicle parking
- · vehicle operations

4.3 MOVEMENT AREA ACCESS AND CONTROL PROCEDURES

This section primarily covers <u>vehicle</u> access and control. Elements of "procedures" may include:

- (a) Vehicle Routes and Corridors
- (b) Pedestrian Traffic Control to and from the Aircraft

4.4 APRON MANAGEMENT AND SAFETY PLAN

Elements of this Plan may include:

- (a) Air Carrier/Heliport Operators' committees to manage the allocation and scheduling of apron space.
- (b) Identification of who runs/provides Apron Management Service (ATC, Heliport Company, and Operator or jointly). If Management Services are provided by more than one group/person, all agreements must clearly delineate responsibilities, authority and operational procedures.
- (c) The coordination of aircraft arrival and departure times, parking allocations, start ups; notification of work in progress, serviceability and security and safety services.
- (d) Contingencies for additional aircraft parking/handling that may be caused by ATC delays or weather.

4.5 DISABLED AIRCRAFT REMOVAL PLAN

Note: It is the Heliport Operator's responsibility to have a Disabled Aircraft Removal Plan. This responsibility does not preclude him/her from negotiating agreements with other agencies for the delivery of certain aspects of the plan. Where other agencies are involved, their responsibility must be clearly delineated.

Elements to be considered are:

- (a) GCAA notification 24 hour phone number
- (b) ATS responsibility and involvement;
- (c) NOTAM requirements;
- (c) responsibilities:
 - Heliport Operator;
 - Aircraft Owners;
 - Other Agencies;
- (d) recovery/removal equipment and resources available:
 - on the heliport;
 - in the heliport vicinity.

4.6 WILDLIFE CONTROL PROGRAM

The presence of wildlife, particularly birds on or adjacent to the heliport can have a significant impact on the safety of flight operations at a heliport. In this section it is important to state:

- how wildlife activity will be monitored
- at what levels will control measures be instituted
- · what wildlife control measures will be employed and by whom
- how will control and communications of personnel and vehicles be maintained
- who will be involved and the coordination measures necessary

4.7 CONSTRUCTION AND MAINTENANCE CONTROL PROCEDURES

This section must state how operational control will be exercised over construction and maintenance activities on the airside. The procedures established and specified in this section should include but are not limited to:

- how will work be coordinated among operations staff, ATC, heliport manager, etc
- when will work be permitted
- procedures for the control of airside obstructions
- specified routes to and from the work area
- vehicle control procedures (when different from routine vehicle control as specified in section 4.3 above) with particular emphasis on non-radio equipped vehicles
- measures to isolate the work area (if required)
- · marking and lighting of effected operational areas

Note: Individual construction projects may require a specific plan to be developed for each project.

4.8 OTHER PROCEDURES

Any other procedures, plans, and programs relevant to the operation of the heliport should be specified in individual sections. An example is operations in low visibility.

APPENDIX A - NOTAM PROCEDURES

Introduction

NOTAMs are issued in accordance with **GCAA NOTAM Procedures Manual**. This section is intended to provide an overview of the process described in that manual.

A NOTAM is a means to disseminate information about changes to facilities, services, procedures, hazards, etc., and of which timely knowledge is essential to personnel concerned with flight operations. NOTAM distribution is through the GCAA data network to provide current information to flight crews.

GCAA's AIS is the focal point for issuing NOTAMs, using standardized format and language.

General Criteria

In accordance with the applicable procedure manual, a NOTAM should be issued between 5 and 48 hours in advance of the change requiring NOTAM issue. Where there is less than 5 hours advance notice, the ATS will broadcast the NOTAM immediately on appropriate air/ground radio frequencies.

A NOTAM is required for any change in the published information about the heliport and/or its operating capabilities, such as:

- > the establishment or withdrawal of electronic and other aids to air navigation and aerodromes;
- > changes in frequency, identification, orientation and location of electronic aids to air navigation;
- > interruptions in service or unreliability, and the return to normal operation of enroute and terminal aids to air navigation;
- > the establishment, withdrawal or significant changes to designated airspace or traffic procedures and services;
- > significant changes in the serviceability of runways and associated approach or runway lighting systems that could restrict aircraft operations;
- > the presence or removal of obstructions which are considered to be hazardous to aircraft navigation.
 - Hazardous obstructions are defined in Part 27
- > military exercises or manoeuvres and airspace reservations;
- > the establishment, discontinuance or change in status of Alert, Danger, Restricted or Military Flying Areas.
- > communications failures where no satisfactory alternate frequency is available. [Note: Emergency and Mandatory Frequencies (MF) where no back-up or emergency transceiver is available must be issued as a NOTAM];
- > inaccuracies or omissions in publications that might endanger aircraft operations; and
- > failure of measuring and/or indicating systems needed to supply current information on altimeter settings, surface wind, runway visual range and cloud height for the pilot about to land/take-off. Where alternatives are available for obtaining readings, NOTAMs are not required.

NOTAM, How to Issue?

When a NOTAM is required, or if there is any uncertainty about the need for a NOTAM, contact the Director - General or ATS.

The Aeronautical Information Service Officer/ Personnel will require the following precise information:

- > the name of the heliport
- > the facility or service to be affected
- > the nature of the change
- > the time at which the change will occur
- > the time at which the change will return to normal (if the change is a temporary one)

Persons Authorized

It may be appropriate to designate an individual or individuals to be responsible for the issuance of a NOTAM. Generally, this will be the Heliport Manager, whose role is to identify and determine the need for a NOTAM.

APPENDIX B - COPIES OF AGREEMENTS

Copies of any agreement or memorandum of understanding that affects the operation of the heliport, including the provision of emergency services at the heliport

- Letters of Agreement
- Letters of Procedures

APPENDIX C - PILOT BRIEFING SHEET

<u>APPENDIX D - EMERGENCY PROCEDURES AND NOTIFICATION SHEETS</u>

APPENDIX E - LOCATION MAP WITH LABELS

APPENDIX F: SECURITY
SYSTEM