



PURSUANT to Section 28 of the Civil Aviation Act 1990

I, HARRY JAMES DUYNHOVEN, Minister for Transport Safety,

HEREBY MAKE the following ordinary rules.

SIGNED AT Wellington

This *16th* day of *May* 2006

by **HARRY JAMES DUYNHOVEN**

Minister for Transport Safety

Civil Aviation Rules

Part 135, Amendment 13

**Air Operations – Helicopters and Small
Aeroplanes**

Docket 3/CAR/4

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Rule objective

The objective of Amendment 13 to Part 135 is to make editorial and minor technical changes as part of a general rule fix up project.

Extent of consultation

A Notice of Proposed Rulemaking, NPRM 05-07, containing the proposed changes to Part 135 was issued for public consultation under Docket 3/CAR/4 on 23 June 2005.

The publication of this NPRM was notified in the *Gazette* on 23 June 2005 and advertised in the daily newspapers in the five main provincial centres on 25 June 2005. The NPRM was published on the CAA web site and mailed to identified stakeholders including representative organisations who were considered likely to have an interest in the proposal.

A period of 37 days was allowed for comment on the proposed rule.

New Zealand Transport Strategy

The development of the NPRM and the proposed rule changes takes into account the objectives of the New Zealand Transport Strategy (NZTS) and the provisions of the Civil Aviation Amendment Act (No 2) 2004.

Summary of submissions

Nine written submissions were received on the NPRM. One submission was received on the proposed amendments to Part 135. A CAA Flight Operations inspector submitted that rules 135.77, 135.87, and 135.803 should be amended in relation to the type of operations covered. These are major amendments outside the scope of the Omnibus project. The CAA has advised the submitter to resubmit these items for consideration in future rule projects.

The rule as proposed was then referred to Parliament's Regulations Review Committee before being signed by the Minister for Transport Safety.

Examination of submissions

Submissions may be examined by application to the Docket Clerk at the Civil Aviation Authority between 8:30 am and 4:30 pm on weekdays, except statutory holidays.

Insertion of Amendments

The amendments to the rules in this Part are reflected by the revocation of the existing rule and the substitution of the new rule.

Effective date of rule

Amendment 13 to Part 135 comes into force on 22 June 2006.

Availability of rules

Civil Aviation Rules are available from—

CAA web site: <http://www.caa.govt.nz/>

Freephone: 0800 GET RULES (0800 438 785)

Part 135 Air Operations — Helicopters and Small Aeroplanes

Subpart B — Flight Operations

Rule 135.69 is revoked and the following new rule is substituted:

135.69 Manipulation of controls

(a) Except as provided in paragraph (b), a person must not manipulate the controls of an aircraft performing an air operation.

(b) A holder of an air operator certificate must take reasonable care to ensure that a person does not manipulate the flight controls of an aircraft performing an air operation under the authority of the certificate, unless the person is—

- (1) a flight crew member; or
- (2) an authorised representative of the Director who—
 - (i) has the permission of the certificate holder and the pilot-in-command; and
 - (ii) is performing a required duty.

Rule 135.85 is revoked and the following new rule is substituted:

135.85 Minimum height for VFR flights

(a) Rule 91.311(c) does not apply to a pilot-in-command of an aircraft performing an air transport operation.

(b) Notwithstanding rule 91.311(c)(4), a pilot-in-command of an aircraft performing a commercial transport operation may, if necessary for the proper accomplishment of the operation, conduct approaches, departures, and manoeuvres below a height of 500 feet above the surface within the horizontal radius of 150 metres of any person, vessel, vehicle, or structure if the pilot-in-command—

- (1) prepares a plan for the operation in conjunction with every person and organisation involved in the operation; and

- (2) takes reasonable care to conduct the operation without creating a hazard to any person or property; and
- (3) briefs every person and organisation involved in the operation on the plan required by paragraph (b)(1).

Rule 135.87 is revoked and the following new rule is substituted:

135.87 Flights over water

(a) A person performing an air operation must not operate over water more than 10 nm beyond gliding or autorotational distance from shore unless—

- (1) life rafts are carried of sufficient rated capacity to carry every occupant of the aircraft; and
- (2) a life preserver is worn by each passenger.

(b) A person performing an air operation in a single engine helicopter must not operate over water more than 10 nm beyond autorotational distance from shore unless—

- (1) the helicopter is equipped with an operable flotation device; or
- (2) each occupant is wearing an immersion suit.

(c) The operator of a multi-engine aircraft may, instead of the requirement in paragraph (a)(2), have life preservers available for use in a position accessible to each passenger.

(d) A person performing an air transport operation over water beyond 100 nm from shore must conduct the flight under IFR.

Rule 135.93 is revoked and the following new rule is substituted:

135.93 Operations over congested areas

(a) Notwithstanding rule 91.311(a)(1), a pilot-in-command of a helicopter may perform a commercial transport operation over a congested area of a city, town or settlement at a height less than 1000

feet above the surface or any obstacle that is within a horizontal radius of 600 metres from the point immediately below the helicopter if—

- (1) a plan for the operation is prepared containing—
 - (i) a chart depicting flight areas and altitudes; and
 - (ii) procedures to ensure that reasonable care is taken to conduct the operation without creating a hazard to any person or property; and
 - (iii) details of any coordination necessary with any air traffic control service; and
 - (iv) a copy of the prior written notification given to the appropriate territorial authority and the requirements of that territorial authority that must be complied with; and
- (2) every person and organisation involved in the operation is briefed on the plan required by paragraph (a)(1); and
- (3) the plan required by paragraph (a)(1) is retained for a period of at least 12 months from the date of the operation.

(b) A pilot-in-command performing an operation in accordance with paragraph (a) must comply with the applicable plan required by paragraph (a)(1).

Subpart C — Operating Limitations and Weather Requirements

Rule 135.155 is revoked and the following new rule is substituted:

135.155 Meteorological conditions – VFR flight

(a) A person performing an air operation must ensure that a VFR flight is not commenced unless current meteorological information

indicates VFR minima prescribed in Part 91 and in paragraphs (b), (c), (d), and (e) can be complied with along the route, or that part of the route to be flown under VFR.

(b) A pilot-in-command of an aeroplane performing a VFR air operation outside controlled airspace must fly in meteorological conditions—

- (1) of not less than a ceiling of 1000 feet AGL and a flight visibility of not less than 5 km; and
- (2) if the operation is by night, of not less than a ceiling of 3000 feet AGL and a flight visibility of not less than 16 km.

(c) A pilot-in-command of a helicopter performing a VFR air transport operation outside controlled airspace must fly in meteorological conditions—

- (1) of not less than a ceiling of 600 feet AGL and flight visibility of not less than 1500 metres; and
- (2) if the operation is by night, of not less than a ceiling of 2000 feet AGL and flight visibility of not less than 5 km.

(d) A pilot-in-command of a helicopter performing a VFR commercial transport operation must—

- (1) manoeuvre the helicopter so that the pilot can, at all times, observe other traffic and any obstruction in time to avoid a collision; and
- (2) for remote aerodrome access, fly in meteorological conditions of not less than a ceiling of 600 feet AGL and flight visibility of not less than 1500 metres; and
- (3) for other than remote aerodrome access, fly beneath the ceiling, remaining clear of cloud, and in continuous sight of the surface and above not more than scattered cloud; and
- (4) if the operation is by night, fly in meteorological conditions of not less than a ceiling of 2000 feet AGL and a flight visibility of not less than 5 km.

- (e) A pilot-in-command of an aircraft may not perform an air operation under VFR above more than scattered cloud unless—
- (1) the aircraft is authorised for IFR flight and the required minimum flight crew for IFR operation, holding current instrument rating qualifications, is performing the operation; and
 - (2) the instruments and equipment, including radio navigation equipment, required for IFR flight are operative; and
 - (3) the aircraft carries radio navigation equipment to enable it to be navigated by IFR to an aerodrome where an instrument approach procedure may be carried out for landing; and
 - (4) the aircraft carries sufficient fuel and fuel reserves to proceed by IFR to an aerodrome where an instrument approach procedure may be carried out for landing.
- (f) Notwithstanding paragraph (e), a pilot-in-command of an aircraft may not perform an air operation carrying passengers under VFR in a single engine aircraft above more than scattered cloud.

Subpart D — Performance

Rule 135.223 is revoked and the following new rule is substituted:

135.223 Landing distance – dry runway

- (a) A holder of an air operator certificate must ensure that, for each aeroplane the certificate holder operates, the landing weight for the estimated time of landing does not exceed the landing weight specified in the aeroplane flight manual.
- (b) A holder of an air operator certificate must ensure that, for each aeroplane the certificate holder operates, the landing weight of the aeroplane for the estimated time of landing at the destination aerodrome and at any alternate aerodrome allows a full-stop landing from 50 feet above the threshold within 85% of landing distance available.
- (c) When calculating the landing weight in accordance with paragraph(b), the certificate holder must take account of—

- (1) aerodrome elevation; and
 - (2) ambient temperature at the aerodrome; and
 - (3) the type of runway surface and the runway surface condition; and
 - (4) the runway slope in the direction of landing; and
 - (5) not more than 50% of the reported headwind component or not less than 150% of the reported tailwind component.
- (d) For dispatch of an aeroplane to land in accordance with paragraphs (b) and (c), the certificate holder must assume that the aeroplane lands on the most favourable runway taking into account—
- (1) the forecast meteorological conditions; and
 - (2) surrounding terrain; and
 - (3) approach and landing aids; and
 - (4) obstacles within the missed approach flight path.
- (e) If the holder of an air operator certificate is unable to comply with paragraph (d) for the destination aerodrome, the aeroplane may be dispatched if an alternate aerodrome is designated that permits compliance with paragraphs (a), (b), and (c).

Subpart F — Instruments and Equipment

Rule 135.353 is revoked and the following new rule is substituted:

135.353 General

A holder of an air operator certificate must ensure that an air operation does not commence unless—

- (1) the aircraft is equipped—
 - (i) with the type of instruments and equipment required by Part 91 and this Subpart; and

- (ii) with the number of instruments and equipment to ensure that the failure of any independent system required for either communication or navigation purposes, or both, does not result in an inability to communicate and navigate safely as required for the route being flown; and
- (2) the instruments and equipment installed in the aircraft comply with the specifications and airworthiness design standards listed in—
 - (i) Appendix B to this Part; or
 - (ii) Appendix B to Part 125; or
 - (iii) Appendix C to Part 21; or
 - (iv) Part 26; or
 - (v) alternative specifications or standards acceptable to the Director; and
- (3) the instruments and equipment have been installed in accordance with the aircraft manufacturer's instructions or other instructions acceptable to the Director; and
- (4) except as may be provided by a MEL approved under rule 91.539 for use for the aircraft, the instruments and equipment installed in the aircraft are in operable condition.

Subpart G — Maintenance

Rule 135.405 is revoked and the following new rule is substituted:

135.405 Maintenance organisation

A holder of an air operator certificate must—

- (1) be certificated under Part 145 and perform the maintenance of the certificate holder's aircraft, including airframe, aircraft engines, propellers, rotors, appliances, emergency

equipment, and parts in accordance with the Part 145 exposition and this Part; or

- (2) contract with another person certificated under Part 145 for the performance of maintenance; or
- (3) for maintenance performed in another State under a technical arrangement with the State, ensure the maintenance is performed by a maintenance organisation that is appropriately certificated and authorised by the State.

Subpart K — Fatigue of Flight Crew

Rule 135.803 is revoked and the following new rule is substituted:

135.803 Operator responsibilities

(a) A holder of an air operator certificate must not cause or permit an air operation to be performed with an aircraft unless—

- (1) a scheme has been established for the regulation of flight and duty times for every person flying as a flight crew member in the aircraft; and
- (2) the scheme addresses the following factors for air transport operations where appropriate to the operator's type of operation:
 - (i) rest periods before flight:
 - (ii) acclimatisation:
 - (iii) time zones:
 - (iv) night operations:
 - (v) maximum number of sectors:
 - (vi) single pilot operations:
 - (vii) two pilot operations:

- (viii) two pilots plus additional flight crew members:
 - (ix) flight crew members' qualifications:
 - (x) mixed duties:
 - (xi) dead-head transportation:
 - (xii) reserve or standby period:
 - (xiii) flight duty period:
 - (xiv) in-flight relief:
 - (xv) type of operation:
 - (xvi) cumulative duty time:
 - (xvii) cumulative flight time:
 - (xviii) discretionary increases in flight time limitations or flight duty limitations or both:
 - (xix) circadian rhythm:
 - (xx) days off:
 - (xxi) record-keeping; and
- (3) the scheme for commercial transport operations, complies with the following:
- (i) flight crew must not fly in excess of 160 hours in any 30 consecutive days:
 - (ii) flight crew must have not less than 2 days free of duty in any 14 day period:
 - (iii) flight crew must have not less than 2 consecutive days free of duty in any 30 day period; and
- (4) the scheme is acceptable to the Director.

(b) The operator of an aircraft performing an air operation must not cause or permit any person to fly in the aircraft as a flight crew member if the operator knows or has reason to believe that the person is suffering from, or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from, such fatigue while the person is flying as may endanger the safety of the aircraft or its occupants.

(c) The operator of an aircraft performing an air operation must—

- (1) keep an accurate record of the flight time and duty time of each flight crew member; and
- (2) retain the flight time and duty time record required by paragraph (c)(1) for a period of 12 months from the date on which it was made.

Subpart L — Manuals, Logs, and Records

Rule 135.857 is revoked and the following new rule is substituted:

135.857 Daily flight record

(a) A holder of an air operator certificate must keep accurate daily flight records for every aircraft, unless the information is recorded in another document in a manner that enables the daily flight record details for every flight to be constructed.

(b) Daily flight records must contain the following details for every flight:

- (1) the date of the flight:
- (2) the name of the operator:
- (3) the name of the pilot-in-command:
- (4) the registration markings of the aircraft:
- (5) the total flight time:
- (6) the number of passengers:

- (7) the type of air operation:
 - (8) the name or identification of the departure and destination aerodromes:
 - (9) the flight number or estimated time of departure:
 - (10) the total of, the empty weight of the aircraft, the weight of any removable equipment, the weight of consumables, and the weight of crew members:
 - (11) the total weight of—
 - (i) passengers; and
 - (ii) goods; and
 - (iii) baggage:
 - (12) the total weight of usable fuel:
 - (13) the take-off weight:
 - (14) evidence that the centre of gravity is within the specified limits:
 - (15) the maximum allowable weights for the operation, including zero fuel weight, take-off weight, and landing weight for the operation:
 - (16) an indication of the occasions when a more indicative weight is used under rule 135.303(f).
- (c) Before every air operation the holder of an air operator certificate must ensure that the information required in paragraphs (b)(11) to (b)(15) is made available to the pilot-in-command in a timely manner to enable the pilot to make the assessment required by rule 135.305(b) regarding the weight and balance of the aircraft.

Appendix B — Instruments and Equipment Airworthiness Design Standards

Table 1 is revoked and the following new table is substituted:

Table 1. Part 135 - Flight Data Recorder Parameter Requirements

When reading the parameter specifications from Table 2 the corresponding shaded specification should be chosen for each parameter. This table refers to the FDR requirements of 135.369.

Parameter	(A)	(B)
	23 Parameter Helicopter	25 Parameter Helicopter
1	Time	Time
2	Airspeed	Altitude
3	Altitude	Airspeed
4	Heading	Heading
5	Vertical acceleration	Vertical acceleration
6	Longitudinal acceleration	Pitch attitude
7	Pitch attitude	Roll attitude
8	Roll attitude	Radio transmitter keying
9	Altitude rate	Power in each engine: Free power turbine speed and engine torque
10	Main rotor speed	Main rotor speed
11	Free or power turbine for each engine	Altitude rate
12	Engine torque for each engine	Pilot input - primary controls
13	Primary hydraulic pressure	Flight control hydraulic pressure low
14	Secondary hydraulic pressure (if available)	Flight control hydraulic pressure selector switch position, 1 st and 2 nd stage
15	Radio transmitter keying	AFCS mode and engagement status

Table 1. Part 135 - Flight Data Recorder Parameter Requirements

When reading the parameter specifications from Table 2 the corresponding shaded specification should be chosen for each parameter. This table refers to the FDR requirements of 135.369.

Parameter	(A)	(B)
	23 Parameter Helicopter	25 Parameter Helicopter
16	Autopilot engaged	SAS status - engaged
17	SAS status - engaged	SAS fault status
18	SAS fault status	Main gearbox temperature low
19	Collective	Main gearbox temperature high
20	Pedal position	Controllable stabilator position
21	Lateral cyclic	Longitudinal position
22	Longitudinal cyclic	Lateral acceleration
23	Controllable stabilator position	Master warning
24		Nav 1 and Nav 2 frequency selection
25		Outside air temperature

Consultation Details

(This statement does not form part of the rules contained in Part 135. It provides details of the consultation undertaken in making the rules.)

Comments arising from the NPRM

The rule amendment was developed under docket 3/CAR/4 and published as NPRM 05-07. The consultation details relating to docket 3/CAR/4 are detailed in each affected rule.

Nine written submissions were received on the NPRM and one commented on the proposed amendments to Part 135.

A CAA Flight Operations inspector submitted the following:

135.77(b). The submitter believes that this rule should be widened to refer to "**Air Operations**" not just "**Air Transport Operations**".

CAA comment: The CAA notes this submission but it is out of scope for this project and requires greater assessment along with consultation. Changing this rule to include Commercial Transport Operations would have wide impact on such operations. The submitter has been contacted to put this issue forward on an Issue Input Form for consideration for future rule development.

135.87(d). The submitter believes that this rule should refer to "**Air Operation**" rather than Air Transport Operation which excludes **Commercial Transport Operations**.

CAA comment: The CAA notes this submission but it is out of scope for this project and requires greater assessment and consultation. The submitter has been contacted to put this issue forward on an Issue Input Form for consideration for future rule development.

135.803 (a)(2). The submitter asks if the words **air transport operations** could be replaced with "**air operations**". The submitter believes this would allow 135.803(a)(3) to be deleted. It is proposed that there should be one flight and duty scheme covering all air operations not the present two scheme system. The submitter notes that there is a comprehensive flight and duty scheme for air transport operations (ATOs) but not for commercial transport operations (CTOs).

CAA comment: *This is a major amendment and is out of the scope of this rule amendment project. The submitter has been contacted to put this issue forward on an Issue Input Form for consideration for future rule development.*

The comments and all background material used in developing these rules are held on the docket. The docket is available for public inspection at Aviation House, 10 Hutt Road. Persons wishing to view the docket should contact the Docket Clerk on Phone 64-4-560-9603 and ask for docket 3/CAR/4.