**Regulations for Civil Aviation** 



# BL 5-55

# **Regulations on flights in MNPS and RVSM airspace**

Edition 1, 19 December 2000

In pursuance of §§ 34 and 82 and subsection 8 of § 149 of the Air Navigation Act, cf. Consolidation Act no. 769 of 16 August 2000, the Civil Aviation Administration - Denmark hereby stipulates as follows on the authority of the Ministry of Transport, cf. Order No. 810 of 19 November 1998 on delegation of authorities to the Civil Aviation Administration - Denmark and on publication of the Regulations issued by the Administration:

### 1. Reference documents

1.1 1.1 ICAO Consolidated Guidance Material North Atlantic Region / NAT Doc 001, T13.5 N, latest edition.

1.2 ICAO Regional Supplementary Procedures Doc 7030, latest edition.

1.3 ICAO Manual on Required Navigation Performance (RNP) Doc 9613-AN/937, latest edition.

1.4 North Atlantic MNPS Airspace Operations Manual by North Atlantic System Planning Group, latest edition.

1.5 JAA Temporary Guidance Material, Leaflet No. 6, "Guidance Material on the Approval of Aircraft and Operators for Flight in Airspace above Flight Level 290 where a 300 M (1000 FT) Vertical Separation Minimum is applied", latest edition.

1.6 BL 1-1, Regulations on maintenance and change of aircraft, latest edition.

1.7 The documents mentioned in paragraphs 1.1, 1.2, 1.3, 1.4 and 1.6, may be bought from:

Civil Aviation Administration - Denmark Aeronautical Information Service Ellebjergvej 50 DK-2450 Copenhagen SV Phone: 3618 6000 Fax: 3618 6001

1.8 The document mentioned in paragraphs 1.5, may be bought on application to:

Global Info Centre IHS Nordic A.S. Strandvejen 130 DK-2900 Hellerup Phone: 39 40 22 44 Fax: 39 40 23 00 E-mail: info@ihsnordic.com

# 2. Definitions

MNPS airspace (Minimum Navigation Performance Specification Airspace - MNPS airspace):

An airspace in which specific navigation requirements have been stipulated to maximum lateral deviation in nautical miles (NM) from assigned or chosen route.

RSVM airspace (Reduced Vertical Separation Minimum Airspace - RVSM Airspace):

An airspace in which a minimum reduced vertical separation of 300 m (1000 ft) is used between FL 290 and FL 410, inclusive.

Required navigation performance (RNP): A statement for the navigation accuracy necessary for flight in a specified airspace.

# 3. Applicability

3.1 This BL applies to air traffic within Danish territory and for air traffic with Danish aircraft.

3.1.1 An aircraft is considered Danish when it is Danish registered or operated under the terms of a Danish operating permit, cf. subsection 2 of § 4 of the Air Navigation Act.

3.2 This BL lays down regulations for flights in the areas (MNPS and RVSM airspace) conditional on a special procedure for the flight and on special approval of navigation equipment, aircraft and operator and/or of the flight crew members in question.

3.3 For foreign registered aircraft not operated under a Danish operating permit, cf. paragraph 3.1.1, only the regulations in Part 4 and paragraph 5.1 shall be complied with when flying within Danish territory, and the aircraft shall be approved in accordance with requirements at least corresponding to the requirements in paragraphs 5.2.1 and 6.3.1.

3.3.1 The aircraft their and navigation equipment shall further be approved by the aviation authorities of the state of registry to flight in MNPS and/or RVSM airspace, respectively, in accordance with the relevant national rules.

3.3.2 When flying in MNPS and RVSM airspace the flight crew members shall fulfil the training requirements of the state of registry.

# 4. General

4.1 The pilot-in-command shall be responsible for the regulations in this BL being observed.

4.1.1 In connection with commercial flights the operator shall also be responsible.

4.2 The pilot-in-command shall be familiar with the servicing of the equipment and the instruments required for flights in the airspace in question.

# 5. Flights in MNPS airspace

## 5.1 General

5.1.1 Unlimited flights in MNPS airspace is conditional on the aircraft being equipped with at least two independent navigation systems approved for flight in MNPS airspace.

5.1.1.1 The following types of navigation equipment may be used for flight in MNPS airspace:

- INS (Inertial Navigation System).
- GPS (Global Positioning System).
- IRS (Inertial Reference System) combined with a Flight Management System.

5.1.2 Limited flights in MNPS airspace (Special Routes Only) is conditional on the aircraft being equipped with specific navigation equipment in accordance with North Atlantic MNPS Airspace Operations Manual.

## 5.2 Airworthiness approval

5.2.1 Navigation systems shall be approved in accordance with the requirements in ICAO Doc 9613-AN/937, cf. paragraphs 5.2.2, 5.2.3 and 5.2.4.

5.2.2 Navigation systems installed by the aircraft manufacturer and approved by the type certifying aviation authority for flight in MNPS airspace do not require approval by the Civil Aviation Administration - Denmark.

5.2.3 Navigation systems for flight in MNPS airspace installed in accordance with s supplementary type certificate issued by the aviation authority in the state of manufacture of the aircraft do not require approval by the Civil Aviation Administration - Denmark.

5.2.4 Navigation systems not fulfilling the installation requirements in paragraphs 5.2.2 and 5.2.3 shall be approved by the Civil Aviation Administration - Denmark by issuance of a Danish supplementary type certificate, cf. paragraphs 4.8 and 5.7 of BL 1-1.

#### 5.3 Operational approval

#### 5.3.1 Commercial flights

5.3.1.1 Operational approval for unlimited or limited flights respectively in MNPS airspace is granted by the Civil Aviation Administration - Denmark upon application by attestation in the operator's Air Operator Certificate (Operations Specifications).

5.3.1.2 Commercial flights in MNPS airspace are subject to

- a. the flight crew members having taken training comprising procedures etc. in North Atlantic MNPS Airspace Operations Manual,
- b. the flight being performed in accordance with the procedures etc. stated in the mentioned Manual, and
- c. the operator's Operations Manual containing a description of requirements and procedures for flight in MNPS airspace, including training programme for flight crew members.

5.3.1.3 Documentation for the training of flight crew members shall be kept by the operator.

#### 5.3.2 Private flights

5.3.2.1 Operational approval of flight crew members to unlimited or unlimited flights, respectively in MNPS airspace is granted by the Civil Aviation Administration - Denmark upon application.

5.3.2.2 Private flights in MNPS airspace are subject to

- a. the flight crew members having taken training comprising procedures etc. in North Atlantic MNPS Airspace Operations Manual with an approved result with a training organisation approved by the Civil Aviation Administration - Denmark for this, or with an operator holding a permission to fly in MNPS airspace,
- b. the flight being performed in accordance with the procedures etc. stated in North Atlantic MNPS Airspace Operations Manual, and
- c. the operational approval of the flight crew members and the North Atlantic Operations Manual being carried during flight.

5.3.2.3 The approval is valid for 24 months, but may be extended for another 24 months' period on condition that the pilot-in-command within the last 12 months have carried out at least 2 flights in MNPS airspace or within the last 12 months have taken renewed training, cf. paragraph 5.3.2.2 a.

## 6. Flights in RVSM airspace

### 6.1 General

Flights in airspace where RVSM approval is required, cf. ICAO Doc 7030, is subject to an approval from the Civil Aviation Administration - Denmark having been granted.

#### 6.2 Airworthiness approval

6.2.1 Aircraft shall be approved in accordance with the requirements in JAA Temporary Guidance Material, Leaflet no. 6, cf. paragraphs 6.2.2, 6.2.3 and 6.2.4.

6.2.2 Aircraft that are type certified and approved by the type certifying aviation authority for flight in RVSM airspace does not require airworthiness approval by the Civil Aviation Administration - Denmark.

6.2.3 Aircraft that are changed by the aircraft manufacturer and approved by the type

certifying aviation authority for flight in RVSM airspace noes not require airworthiness approval by the Civil Aviation Administration -Denmark.

6.2.4 Aircraft approved in another way than described in paragraphs 6.2.2 and 6.2.3, shall be approved by the Civil Aviation Administration - Denmark by issuance of a Danish supplementary type certificate, cf. paragraphs 4.8 and 5.7 of BL 1-1.

#### 6.3 Operational approval

#### 6.3.1 Commercial flights

6.3.1.1 Operational approval for flight in RVSM airspace is granted by the Civil Aviation Administration - Denmark upon application by attestation in the operator's Air Operator Certificate (Operations Specifications) valid for the aircraft/aircraft types approved for RVSM.

6.3.1.2 Commercial flights in airspace requiring RVSM approval are subject to

- a. the flight crew members having taken training fulfilling the training requirement in JAA Temporary Guidance Material, Leaflet no. 6, "Guidance Material on the Approval of Aircraft and Operators for Flight in Airspace above Flight Level 290 where a 300 M (1000 FT) Vertical Separation Minimum is applied",
- b. the flight being performed in accordance with the procedures etc. stated in the JAA Temporary Guidance Leaflet No. 6, and
- c. the operator's Operations Manual containing a description of requirements and procedures for flight in the relevant RVSM airspace, including training programme for flight crew members.

6.3.1.3 Documentation for the training of flight crew members shall be kept by the operator.

#### 6.3.2 Private flights

6.3.2.1 Operational approval of flight crew members for flights in RVSM airspace is granted by the Civil Aviation Administration - Denmark upon application.

6.3.2.2 Private flights in airspace requiring RVSM approval are subject to

- a. the flight crew members having taken training comprising procedures etc. in JAA Temporary Guidance Material, Leaflet No. 6, with an approved result with a training organisation approved by the Civil Aviation Administration - Denmark for this, or with an operator holding a permission to fly with RVSM,
- b. the flight being performed in accordance with the procedures etc. stated in JAA Temporary Guidance Material, Leaflet No. 6, and
- c. the operational approval of the flight crew members being carried during flight.

6.3.2.3 The approval is valid for 24 months, but may be extended for another 24 months' period on condition that the applicant within the last 12 months have carried out at least 2 flights in RVSM airspace or within the last 12 months have taken renewed training, cf. paragraph 6.3.2.2 a.

# 7. Exemption

The Civil Aviation Administration - Denmark may in particularly exceptional cases grant exemption from the regulations in this BL when it is deemed compatible with the considerations on which the regulations in question are based.

## 8. Punishment

8.1 For air traffic within Danish territory, violation of the regulations in paragraphs 3.3.1, 3.3.2, 4.2, 5.1.1, 5.1.2, 5.3.1.2, 5.3.2.2, 6.1, 6.3.1.2 and 6.3.2.2, cf. paragraphs 4.1

and 4.1.1 is punishable with fine, simple detention or imprisonment for up to 2 years.

8.2 Penalty may be imposed on companies etc. (legal persons) in accordance with the rules in Chapter 5 of the Criminal Code, cf. subsection 14 of § 149 of the Air Navigation Act.

## 9. Implementation

This BL comes into force on 1 January 2001..

The Civil Aviation Administration - Denmark, 19 December 2000

Ole Asmussen

/Sven E. Andresen