|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Ansökan om MNPS *Version 2019-11-15* | | |  |
|  | | | | |
| Operatör: | | | | | |
|  | | | | | |
| Tillståndsnummer: | | Ifylld EASA Form 2 | | | |
|  | |  | | | |
|  | | | Bilaga nr: | | |
| Relevant elements defined in the mandatory part of the Operational Suitability Data (OSD) established in accordance with Regulation (EU) No 748/2012 are taken into account | | |  | | |
| Specificera vilket/vilka luftrum ansökan gäller | | | | | |
|  | | | | | |
|  | | | | | |
| Transportstyrelsen | | | | | |
| Ärendenummer: | | Handläggare: | | | |
|  | |  | | | |
| Berörda sektioner/samråd: | | | | | |
|  | | | | | |
| Information | | | | | |
|  | | | | | |
| Denna checklista är avsedd som stöd vid ansökan om Minimum Navigation Performance Specification.  För flygning i NAT-HLA, North Atlantic – High Level Airspace, FL 285 – FL 420 (inkluderat) refereras till NAT Doc 007 i denna checklista.  För flygning i övriga luftrum där man definierat MNPS refereras till ICAO Doc 7030 i denna checklista.  För samtliga luftrum ska alltid relevanta AIP konsulteras.  Ref. till inledande kapitel i del-SPA, SPA.GEN, med tillhörande AMC och GM (se EU 965/2012).  Ref. också till MFL OPS 1-2018, Prestandabaserade separationsminima – NAT HLA (om **utökade krav** **från den 29 mars 2018** inom NAT HLA gällande Performance Based Communication and Surveillance, PBCS).  Vid utrymmesbrist, notera i bilagor och hänvisa till dessa.  För övriga specialtillstånd, se separata checklistor.  *Notera att krav på RVSM gäller för hela området inom NAT-HLA (FL 290-FL 410), se separat ansökan.*  *Notera att ansökan om utökning av operationsområde kan vara aktuellt, se separat ansökan*   |  | | --- | | Där grönmarkerade rutor förekommer ska relevanta bilagor sändas in. Bilagans nummer ska anges i checklistan. |   Relevanta regelparagrafer i detta dokument följs av en ruta där operatören anger var i manualverket paragrafen omhändertagits och detta ska skrivas på detaljnivå för att underlätta och påskynda granskning och handläggning; att endast ange OM-A kap 8 är inte acceptabelt. | | | | | |

|  |  |  |
| --- | --- | --- |
| SPA MNPS.100 | | |
|  | | |
| Aircraft shall only be operated in designated minimum navigation performance specifications (MNPS)  airspace in accordance with regional supplementary procedures, where minimum navigation  performance specifications are established, if the operator has been granted an approval by the  competent authority to conduct such operations. | | |
| GM1 SPA.MNPS.100 MNPS Operations | | |
|  | | |
| MNPS and the procedures governing their application are published in the Regional Supplementary  Procedures, ICAO Doc 7030, as well as in national AIPs.  *Note: Doc 7030 refers to ICAO NAT Doc 007 (North Atlantic Operations and Airspace Manual) which gives the conditions for operational approval and aircraft equipment requirements for operations in the NAT region.*  *Implementation of PBCS/PBN based separation minima in the NAT airspace - The chain of regulatory references: Reg. (EU) 965/2012 (SPA.MNPS) → ICAO Doc 7030 → NAT Doc 007.* | | |
| ICAO Doc 7030 Regional Supplementary Procedures | | |
|  | | |
| Operatören ska omhänderta alla applicerbara delar i gällande ICAO Doc 7030 för MNPS i andra luftrum än NAT/HLA.  Nedanstående kapitelindelning är baserad på ICAO Doc 7030 Fifth edition – 2008. | | |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 1 Flight Rules |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 2 Flight Plans |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 3 Communications |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 4 Navigation |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 5 Surveillance |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 6 Air Traffic Services |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 7 Safety Monitoring |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 8 Air Traffic Flow Management |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 9 Special Procedures |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 10 Phraseology |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 11 Search and Rescue |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 12 Meteorology |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 13 Aeronautical Information Services |  |  |

|  |  |  |
| --- | --- | --- |
| ICAO Doc 007 North Atlantic Operations and Airspace Manual | | |
|  | | |
| Operatören ska omhänderta alla applicerbara delar i gällande ICAO Doc 007 för NAT/HLA MNPS. Nedanstående kapitelindelning är baserad på NAT Doc 007 version 2018-2.  [Länk till ICAO EUR/NAT Regional Documents](https://www.icao.int/EURNAT/Pages/EUR-and-NAT-Document.aspx?RootFolder=%2FEURNAT%2FEUR%20and%20NAT%20Documents%2FNAT%20Documents&FolderCTID=0x012000DAF95319EADD9946B510C5D7B595637D00AA5EB47B299B9A4BAD1968B24E18655C&View=%7B2666E7DD%2D5F4E%2D4E64%2DB16A%2DCF142A1E5BC9%7D) | | |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 1 Operational approval and aircraft system requirements for flight in the NAT HLA |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 2 The Organised Track System (OTS) |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 3 Routes, route structures, and transition areas within or adjacent to the NAT HLA |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 4 Flight Planning |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 5 Oceanic ATC clearances |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 6 Communications and position reporting procedures |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 7 Application of MACH number technique |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 8 NAT HLA/MNPS flight operation & navigation procedures |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 9 RVSM flight in the NAT HLA |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 10 ATS surveillance services in the NAT HLA |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 11 Monitoring of aircraft systems and crew performance |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 12 Procedures in the event of navigation system degradation or failure |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 13 Special procedures for in-flight contingencies |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 14 Guarding against common errors |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 15 The prevention of lateral deviations from track |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 16 Guidance for dispatchers |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| Chapter 17 Flight operations below the NAT HLA |  |  |
| RNAV 10 (RNP 10) Navigation Specification | | |
|  | | |
| **Oceanic/Remote, RNAV 10 (designated and authorised as RNP 10)**  Acceptable means of compliance for RNAV 10 (RNP 10) are provided in EASA AMC 20-12, “Recognition of FAA order 8400.12a for RNP 10 Operations”. Although RNAV 10 airspace is, for historical reasons, also called RNP 10 airspace, there is no requirement for on-board monitoring and alerting systems. RNAV 10 can support 50 NM track spacing. For an aircraft to operate in RNAV 10 (RNP 10) airspace it needs to be fitted with a minimum of two independent long range navigation systems (LRNSs). Each LRNS should in principle have a flight management system (FMS) that utilises positional information from either an approved global navigation satellite system (GNSS) or an approved inertial reference system (IRS) or mixed combination. The mix of sensors (pure GNSS, pure IRS or mixed IRS/GNSS) determines pre-flight and in-flight operation and contingencies in the event of system failure. | | |
| RNP 4 Navigation Specification | | |
|  | | |
| **Oceanic/Remote, RNP 4**  Guidance for this RNP standard is provided in ICAO Doc 9613. RNP 4 is the oceanic/remote navigation specification to support 30 NM track spacing with ADS-C and CPDLC required. To meet this more accurate navigation requirement, two independent LRNS are required for which GNSS sensors are mandatory. If GNSS is used as a stand-alone LRNS, an integrity check is foreseen (fault detection and exclusion).Additional aircraft requirements include two long range communication systems (LRCSs) in order to operate in RNP4 designated airspace. The appropriate Aeronautical Information Publication (AIP) should be consulted to assess coverage of HF and SATCOM. The additional requirements may include use of automatic dependent surveillance (ADS) and/or controller pilot data link communication (CPDLC). | | |
| SPA.MNPS.105 MNPS operational approval | | |
|  | | |
| To obtain an MNPS operational approval from the competent authority, the operator shall provide  evidence that: | | |
|  | Bilaga nr: | TS notering: |
| (a) the navigation equipment meets the required performance; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (b) navigation displays, indicators and controls are visible and operable by either pilot seated at  his/her duty station; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (c) a training programme for the flight crew members involved in these operations has been  established; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (d) operating procedures have been established specifying:  (1) the equipment to be carried, including its operating limitations and appropriate entries in  the MEL; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (2) flight crew composition and experience requirements; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (3) normal procedures; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (4) contingency procedures including those specified by the authority responsible for the airspace concerned; |  |  |
|  | Detaljerade referenser i OM: | TS notering: |
| (5) monitoring and incident reporting. |  |  |
| AMC1 SPA.MNPS.105 | | |
| LONG RANGE NAVIGATION SYSTEM (LRNS) | | |
|  | Bilaga nr: | TS notering: |
| (a) For unrestricted operation in MNPS airspace an aircraft should be equipped with two independent  LRNSs. |  |  |
|  | Bilaga nr: | TS notering: |
| (b) An LRNS may be one of the following:  (1) one inertial navigation system (INS);  (2) one global navigation satellite system (GNSS); or  (3) one navigation system using the inputs from one or more inertial reference system (IRS) or  any other sensor system complying with the MNPS requirement. |  |  |
|  | Detaljerade referenser i OM (om applicerbart): | TS notering: |
| (c) In case of the GNSS is used as a stand-alone system for LRNS, an integrity check should be carried  out. |  |  |
|  | Bilaga nr: | TS notering: |
| (d) For operation in MNPS airspace along notified special routes the aeroplane should be equipped  with one LRNS. |  |  |