

PARTS NCO & SPO

Vorschriften für die Allgemeine Luftfahrt und Arbeitsflüge

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PARTS NCO & SPO

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Flugzeuge und Helikopter:

- Part-NCO: Anwendbar seit 25.08.2016
- Part-SPO: Anwendbar spätestens 21.04.2017

Segelflieger und Ballone:

- Anwendbarkeit ab 08.04.2019

DEFINITIONEN

- NCO: Non-Commercial Air Operations with Other-Than Complex Motor-Powered Aircraft
- > Commercial?
- > Air Operations?
- > Complex Aircraft?
- (Basic Reg. 216/2008)

DEFINITIONEN

- Commercial Operation: „shall mean any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator.“
- Air Operation: Operation of an aircraft (jeder Flug)

DEFINITIONEN

- Complex Aircraft:

Aeroplanes:

- MTOM > 5700 kg
- > 19 PAX
- MPA
- Jet
- Multi-engine
turboprop

Helicopter:

- MTOM > 3175 kg
- > 9 PAX
- MPH
- Tilt-rotor

For complex aircraft, see Part-NCC!

DEFINITIONEN

- SPO: An „operation where the aircraft is used for specialised activities such as agriculture, construction, photography, surveying, observation and patrol, aerial advertisement.“

(SPO.GEN.005 (a)); BUT: Non-commercial SPO: See Part-NCO!

- external loads, helicopter survey, human external cargo, **parachute/skydiving**, agricultural flights, **aerial photography**, **glider towing**, aerial advertising, calibration, construction work, stringing power line operations, clearing saw operations, oil spill work, survey operations, aerial mapping, pollution control, news media, television and movie flights, special events (flying display and competition), aerobatic flights, animal herding, animal rescue flights and veterinary dropping flights, maritime funeral, scientific research, **cloud seeding**, sensational flights

PART-NCO

- NCO.GEN: Allgemeine Anforderungen
 - Authority, AMCs, Documents and records
 - PIC responsibilities, taxiing
- NCO.OP: Betriebsvorschriften
 - Aerodromes, Minima
 - Flight preparation, Flight and Ground procedures
- NCO.POL: Flugleistung und Limitations
 - Mass and Balance,
- NCO.IDE: Instrumente, Daten und Ausrüstung
- NCO.SPEC: Non-commercial SPOs

NCO.GEN

- NCO.GEN.100: Competent Authority
 - Determined by aircraft registration
- NCO.GEN.101: Means of Compliance
 - Alternative AMCs
- NCO.GEN.102: TMGs, powered sailplanes and mixed balloons
 - TMGs je nach Motorverwendung
- NCO.GEN.103: Introductory flights
 - A to A, day VFR, overseen by responsible person

NCO.GEN

- NCO.GEN.105: PIC responsibilities and authority
 - Bordgewalt
 - Operational Control
 - Lufttüchtigkeit, Einhaltung der SOPs und Limits (Checklisten vom Hersteller!)
 - Fitness
 - Passagiere, Gepäck
 - Flugvorbereitung
 - Meldepflichten

NCO.GEN

- NCO.GEN.110: Compliance with laws, regulations and procedures
 - PIC Verantwortung
- NCO.GEN.115: Taxiing of aeroplanes
 - Nur durch Pilot oder vom Halter Eingewiesenen
- NCO.GEN.125: Portable Electronic Devices
 - Kategorien von PEDs, die ausgeschaltet werden müssen („adverse effect on systems and equipment“)
 - Was tun bei Batteriebränden?
- NCO.GEN.130: Info on emg. and survival equ.

NCO.GEN

- NCO.GEN.135: Documents, manuals and information to be carried
 - AFM
 - *Registration
 - *CofA
 - *Lärmzeugnis
 - *SPA-list
 - *Funkbewilligung
 - *Versicherung
 - *„Bordbuch“
 - ATS Flugplan
 - Kartenmaterial
 - Signale beim Abfangen
 - MEL/CDL
 - Etc. (lokale Vorschriften)
- * Für Lokalflüge am Boden zulässig
- In „reasonable time“ vorzulegen

NCO.GEN

- NCO.GEN.140: Transport of DG
 - Gem. ICAO TI und Part-SPA
- NCO.GEN.145: Immediate reaction to a safety problem
 - Maßnahmen durch „Competent Authority“
- NCO.GEN.150: Journey Log
 - Inhalt (Unterschrift des PIC!)
 - Bordbuch, Technical Log, OFP o.ä.
- NCO.GEN.155: MEL
 - Optional (im Gegensatz zu Part-NCC!)

NCO.OP

- NCO.OP.100: Use of aerodromes
 - Adequate aerodromes (Flugzeugtyp, Betriebsart)
- NCO.OP.105: Isolated aerodromes
 - Mehr als 60 min (Kolbenmotor) zu einem Alternate
- NCO.OP.110: Aerodrome operating minima
 - VFR (wie üblich) und IFR (CAT I, oder SPA)
 - Berücksichtigung von Flugleistung, Facilities, Ausrüstung, Hindernisse, Flugverfahren
 - Höchster Wert von: Flugplatz, Flugzeug-ausrüstung, Flugleistung, Pilot
 - NCO.OP.111/112: Minima for NPA, APV, CAT I, Circling

NCO.OP

- NCO.OP.113: Onshore circling (helicopters)
- NCO.OP.115: Departure and approach proc.
- NCO.OP.116: Performance-based navigation
- NCO.OP.120: Noise abatement (A), (H)
- NCO.OP.121: Noise abatement – balloons (!)

NCO.OP

- NCO.OP.125: Fuel and oil supply - aeroplanes
 - Final reserve: 30 Minuten VFR day;
45 Minuten sonst (at normal cruising altitude)
- NCO.OP.126: Fuel and oil supply – helicopter
- NCO.OP.127: Fuel and ballast – balloons
- NCO.OP.130: Passenger briefing
 - Exits
 - Briefing cards
 - Life jackets
 - Oxygen
 - Life-rafts
 - Other individual equipment
 - Collective equipment
 - Seat belts

NCO.OP

- NCO.OP.135: Flight preparation
 - Facilities (incl. COMM, NAVAIDs)
 - All available MET information (outside vicinity), including reports and forecasts
 - Planning of alternative course of action
- NCO.OP.140: Alternate aerodromes
 - IFR: Specify(!) at least one, except VMC or isolated
- NCO.OP.141: Alternates – helicopters
- NCO.OP.142: Destination IFR approach ops.

NCO.OP

- NCO.OP.145: Refuelling with PAX
 - Not with AVGAS!
- NCO.OP.150: Carriage of passengers
 - Cabin safety, use of seats and seat belts
- NCO.OP. 155/156: Smoking on board
- NCO.OP.160: Meteorological conditions
 - Flug nur beginnen, wenn Wetterbedingungen über Minimum (zumindest bei einem Alternate)

NCO.OP

- NCO.OP.165: Ice and contaminants – ground
- NCO.OP.170: Ice and contaminants – flight
- NCO.OP.175/176: Take-off conditions
 - Weather and aerodrome condition, minima
- NCO.OP.180: Simulated situations in flight
 - Not with passengers or cargo
- NCO.OP.185: In-flight fuel management
 - Regular fuel checks
 - Min. remaining trip + final reserve

NCO.OP

- NCO.OP.190: Use of supplemental oxygen
 - Besatzungsmitglieder: > 30 min. zwischen 10.000 und 13.000 ft press. alt.
 - Alle Insassen: Immer wenn über 13.000 ft press. alt.
- NCO.OP.195: Ground proximity detection
 - Sofortige Reaktion
- NCO.OP.200/220: ACAS II
 - Training and procedures required

NCO.OP

- NCO.OP.205: Approach and landing conditions
 - Vor Anflug: Bedingungen müssen sicheren Anflug, Landung oder Fehlanflug zulassen
- NCO.OP.210: Commencement and continuation of approach
 - 1000 ft AAL oder Final approach (wenn minimum > 1000 ft) muß Wetter über Minimum sein
 - Required visual reference at MDA/DA
- NCO.OP.215: Operational limitations – balloons

NCO.POL

- NCO.POL.100: Operating limitations
 - Loading, mass and balance gem. AFM
 - Placards, listings, instr. markings displayed
- NCO.POL.105: Weighing
 - Actual weighing vor erstem Einsatz
 - Änderungen und Reparaturen berücksichtigt
- NCO.POL.110: Performance
 - Nur wenn Luftverkehrsregeln und andere Beschränkungen eingehalten werden können
 - Berücksichtigung von „charting accuracy“

NCO.IDE

- NCO.IDE.A.100: Instruments and equ. – gen.
 - Approval erforderlich, außer: Ersatzsicherungen, Taschenlampen, Uhr, FAK, Überlebensausrüstung, Treibanker, CRDs, Chart holder
- NCO.IDE.A.105: Minimum equipment for flight
 - Nur gemäß MEL oder mit PtF
- NCO.IDE.A.110: Spare electrical fuses
- NCO.IDE.A.115: Operating lights
 - Bei Nacht: Anti-collision, navigation/position, landing, instruments, passenger compartment, portable light for each crew member station

NCO.IDE

- NCO.IDE.A.120: Operations under VFR
 - Kompaß, Uhr, Höhenmesser, Fahrtmesser
 - Bei Nacht plus: Wendezeiger, künstl. Horizont, Variometer, Kurskreisel, Warnung bei Leistungsverlust für Kreisel (Suction oder Low Volt)
- NCO.IDE.A.125: Operations under IFR
 - W.o. (Nacht) plus: OAT, Staurohrheizung
- NCO.IDE.A.130: TAWS
 - Turbinenluftfahrzeuge > 9 PAX (NCC?)
- NCO.IDE.A.135: Flight Crew Interphone
 - Mehr als ein Besatzungsmitglied + Headsets & Mic.

NCO.IDE

- NCO.IDE.A.140: Seats, Belts, Restraint
 - Ein Sitz pro Person (Ausnahmen in NCO.SPEC.PAR)
 - Upper torso restraint system for flight crew seats
 - CRDs
- NCO.IDE.A.145: First Aid Kit
 - Content, Maintenance
- NCO.IDE.A.150/155: Supplemental oxygen
 - Pressurised aeroplanes
 - Non-pressurised aeroplanes

NCO.IDE

- NCO.IDE.A.160: Hand fire extinguishers
 - Ausnahme für TMG und ELA1
- NCO.IDE.A.165: Marking of break-in points
- NCO.IDE.A.170: ELT
 - Bis 6 Sitzplätze: ELT(S) or PLB zulässig
 - 121,5 und 406 MHz
 - Batterien, Batterieservice
- NCO.IDE.A.175: Flight over water
 - Einmotorig: Gleitdistanz, An-/Abflug über Wasser
 - Alle: > 50 nm (30 min. cruise) von Notlandeplatz

NCO.IDE

- NCO.IDE.A.180: Survival equipment
 - „Areas in which search and rescue would be especially difficult“
- NCO.IDE.A.190: Radio communication equ.
 - According Airspace requirements
- NCO.IDE.A.195: Navigation equipment
 - Acc. ATS Flight plan and airspace requirements
 - PBN: According airworthiness and navigation specification
- NCO.IDE.A.200: Transponder
- NCO.IDE.A.205: Database management

NCO.SPEC

- NCO.SPEC.100 – 175: General
 - Scope, Checklist, PIC/Crew responsibilities, Safety Briefing, Operating procedures, Performance
- NCO.SPEC. HESLO: Helicopter external sling load operations
- NCO.SPEC.HEC: Human external cargo operations
- NCO.SPEC.PAR: Parachute operations
- NCO.SPEC.ABF: Aerobatic flights

PART-SPO

- ORO.GEN & ORO.SPO.100 – 120 anwendbar
- Declaration erforderlich (ORO.DEC.100)
- Vorschriften für dry-/wet-lease
- ORO.AOC.135, 140, 150 anwendbar
(Nominated postholders, facility requirements, operations manual)
- „High risk“ SPO erfordert Genehmigung
- Änderungen sind zu melden
- „Continued validity“ solange Anforderungen eingehalten werden

PART-SPO

- ORO.GEN
 - ORO.GEN.105: Competent Authority
 - ORO.GEN.110: Operator Responsibilities
 - ORO.GEN.120: (Alternative) Means of Compliance
 - ORO.GEN.140-160: Access by Authority, Findings, Safety Problems, Occurrence Reporting
 - ORO.GEN.200: Management System (Responsibilities, Compl. Mon., Safety Mgmt., Training Program)
 - ORO.GEN.210–220: Personnel, Facilities, Records

PART-SPO

- ORO.MLR.100: Operations Manual
 - AMC4 ORO.MLR.100: Struktur ähnlich wie CAT (Parts A-D, Kapitel)
- ORO.MLR.105: MEL
- ORO.MLR.110: Journey log
 - Inhalt
- ORO.MLR.115: Record-keeping
 - Aufbewahrungsfristen (3m, 3y, ...)

PART-SPO

- ORO.FC.1xx: Common requirements for all commercial operations
 - Composition of flight crew
 - Designation of PIC
 - CRM training
 - Operator conversion course
 - Differences and familiarisation training
 - Recurrent training
 - Operation on more than one type or variant
 - Training procedures (programs, OSD, FSTDs)

PART-SPO

- SPO.GEN: Allgemeine Anforderungen
 - Wie NCO.GEN
 - Zusätzlich: SPO.GEN.115: Common language
 - SPO.GEN.145: Handling of FDR/CVR recordings
 - SPO.GEN.160: Carriage and use of weapons
 - SPO.GEN.165: Admission to flight crew compartment

PART-SPO

- SPO.OP: Betriebsvorschriften
 - Wie NCO.OP
 - Zusätzlich: SPO.OP.110 (AMC): Take-off operations with complex aircraft
 - SPO.OP.125: Minimum obstacle clearance – IFR
 - SPO.OP.135: Safety briefing (taks specialists)
 - SPO.OP.160: Use of headset
 - SPO.OP.175: Icing ground procedures: detailed GM
 - SPO.OP.176: Icing flight procedures: AMC with procedures and training
 - SPO.OP.200/205: TAWS/ACAS: detailed GM
 - SPO.OP.203: SOPs required

PART-SPO

- SPO.POL: Aircraft performance and operating limitations
 - SPO.POL.100: Analog NCO.POL.100
 - SPO.POL.105: Weighing: Zusätzlich Einführung eines „operational c.g. envelope“
 - SPO.POL.110: Mass and balance system (DOM, standard masses, loading, ...)
 - SPO.POL.115: Mass and balance documentation (!)
 - SPO.POL.125 – 140: for complex A/C

PART-SPO

- SPO.IDE.A: Analog NCO.IDE.A
 - Zusätzliche Anforderungen für complex A/C (Wetterradar, Slip indication, CVR, FDR, Data link recording, Crash axe, ...)
- SPO.SPEC: Gleiche Inhalte/Aufteilung wie NCO.SPEC