

**AIP ENR 1.10 Amendment**

**ITEM 10: EQUIPMENT AND CAPABILITIES**

**Radio Communication, Navigation and Approach Aid Equipment and Capabilities**

*INSERT* one letter as follows:

N if no COM/NAV/approach aid equipment for the route to be flown is carried, or the equipment is unserviceable.

OR

S if standard COM/NAV/approach aid equipment for the route to be flown is carried and serviceable

*Standard equipment is considered to be VHF RTF, VOR and ILS*

**AND/OR** one or more of the following to indicate the serviceable COM/NAV/approach aid equipment and capabilities:

- |    |                                  |       |  |
|----|----------------------------------|-------|--|
| A  | GBAS landing system              | J7    | CPDLC FANS 1/A SATCOM (Iridium)                            |
| B  | LPV (APVwith SBAS)               | K     | MLS  |
| C  | LORAN C                          | L     | ILS  |
| D  | DME                              | M1    | ATC RTF SATCOM (INMARSAT)                                  |
| E1 | FMC WPR ACARS                    | M2    | ATC RTF (MTSAT)  |
| E2 | D-FIS ACARS                      | M3    | ATC RTF (Iridium)  |
| E3 | PDC ACARS                        | O     | VOR  |
| F  | ADF                              | P1–P9 | Reserved for RCP   |
| G  | GNSS (see Note 1)                | R     | PBN approved (see Note 2)                                  |
| H  | HF RTF                           | T     | TACAN  |
| I  | Inertial Navigation              | U     | UHF RTF  |
| J1 | CPDLC ATN VDL Mode 2             | V     | VHF RTF  |
| J2 | CPDLC FANS 1/A HFDL              | W     | RVSM approved  |
| J3 | CPDLC FANS 1/A VDL Mode A        | X     | MNPS approved  |
| J4 | CPDLC FANS 1/A VDL Mode 2        | Y     | VHF with 8.33 kHz channel spacing capability               |
| J5 | CPDLC FANS 1/A SATCOM (INMARSAT) | Z     | Other equipment carried or other capabilities (see Note 3) |
| J6 | CPDLC FANS 1/A SATCOM (MTSAT)    |       |  |

*Note 1* Inclusion of the letter G indicates that an aircraft meets the conditions and requirements for the use of GNSS (GPS) equipment. Types of external GNSS augmentation, if any, are specified in Item 18 following the indicator NAV/ separated by a space.

*Note 2* Inclusion of the letter R indicates that an aircraft meets the RNP type prescribed for the route segment(s), route(s), or area concerned. The performance based navigation levels that can be met are specified in Item 18 following the indicator PBN/.

*Note 3 If the letter Z is used, the other equipment carried or other capabilities are specified in Item 18 following the indicator COM/, NAV/, or DAT/ as appropriate.*

### **Surveillance Equipment and Capabilities**

**INSERT** N if no surveillance equipment for the route to be flown is carried, or the equipment is unserviceable,

OR

*INSERT* one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

#### *SSR Modes A and C*

A Transponder — Mode A (4 digits — 4 096 codes)

C Transponder — Mode A (4 digits — 4 096 codes) and Mode C

#### *SSR Mode S*

E Transponder — Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability

H Transponder — Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability

I Transponder — Mode S, including aircraft identification, but no pressure-altitude capability

L Transponder — Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability

P Transponder — Mode S, including pressure-altitude, but no aircraft identification capability

S Transponder — Mode S, including both pressure altitude and aircraft identification capability

X Transponder — Mode S with neither aircraft identification nor pressure-altitude capability

*Note.* — *Enhanced surveillance capability is the ability of the aircraft to down-link aircraft derived data via a Mode S transponder.*

#### *ADS-B*

B1 ADS-B with dedicated 1090 MHz ADS-B “out” capability

B2 ADS-B with dedicated 1090 MHz ADS-B “out” and “in” capability

U1 ADS-B “out” capability using UAT

U2 ADS-B “out” and “in” capability using UAT

V1 ADS-B “out” capability using VDL Mode 4

V2 ADS-B “out” and “in” capability using VDL Mode 4

ADS-C

- D1 ADS-C with FANS 1/A capabilities
- G1 ADS-C with ATN capabilities

*Note.*— Additional surveillance application should be listed in Item 18 following the indicator SUR/ .

**Item 18: OTHER INFORMATION**

*INSERT* 0 (zero) if no other information,

*OR,*

Any other necessary information in the sequence shown hereunder, in the form of the appropriate indicator followed by an oblique stroke and the information to be recorded:

- STS/ Reason for special handling by ATS, e.g. a search and rescue mission, as follows:
- ALTRV for a flight operated in accordance with an altitude reservation;
  - ATFMX for a flight approved for exemption from ATFM measures by the appropriate ATS authority;
  - FFR fire-fighting;
  - FLTCK flight check for calibration of nav aids;
  - HAZMAT for a flight carrying hazardous material;
  - HEAD a flight with Head of State status;
  - HOSP for a medical flight declared by medical authorities;
  - HUM for a flight operating on a humanitarian mission;
  - MARSA for a flight for which a military entity assumes responsibility for separation of military aircraft;
  - MEDEVAC for a life critical medical emergency evacuation;
  - NONRVSM for a non-RVSM capable flight intending to operate in RVSM airspace;
  - SAR for a flight engaged in a search and rescue mission; and
  - STATE for a flight engaged in military, customs or police services.

For NZ domestic use only:

- IFT instrument rating flight test – initial issue
- PHOT photography
- T1A IFR training one approach. Insert different number if more than one approach

Other reasons for special handling by ATS shall be denoted under the designator RMK/.

PBN/ Indication of RNAV and/or RNP capabilities. Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters.

	<b>RNAV SPECIFICATIONS</b>
A1	RNAV 10 (RNP 10)
B1	RNAV 5 all permitted sensors
B2	RNAV 5 GNSS
B3	RNAV 5 DME/DME
B4	RNAV 5 VOR/DME
B5	RNAV 5 INS or IRS
B6	RNAV 5 LORANC
C1	RNAV 2 all permitted sensors
C2	RNAV 2 GNSS
C3	RNAV 2 DME/DME
C4	RNAV 2 DME/DME/IRU
D1	RNAV 1 all permitted sensors
D2	RNAV 1 GNSS
D3	RNAV 1 DME/DME
D4	RNAV 1 DME/DME/IRU
	<b>RNP SPECIFICATIONS</b>
L1	RNP 4
O1	Basic RNP 1 all permitted sensors
O2	Basic RNP 1 GNSS
O3	Basic RNP 1 DME/DME
O4	Basic RNP 1 DME/DME/IRU
S1	RNP APCH
S2	RNP APCH with BARO-VNAV
T1	RNP AR APCH with RF (special authorization required)
T2	RNP AR APCH without RF (special authorization required)

NAV/ Significant data related to navigation equipment, other than specified in PBN/, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. NAV/GBAS SBAS.

COM/ Indicate communications applications or capabilities not specified in Item 10a.

DAT/ Indicate data applications or capabilities not specified in 10a.

SUR/ Include surveillance applications or capabilities not specified in Item 10b.

DEP/ Name and location of departure aerodrome, if ZZZZ is inserted in Item 13, or the ATS unit from which supplementary flight plan data can be obtained, if AFIL is inserted in Item 13. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location as follows:

With 4 figures describing latitude in degrees and tens and units of minutes followed by "N" (North) or "S" (South), followed by 5 figures describing longitude in degrees and tens and units of minutes, followed by "E" (East) or "W" (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. 4724S17905E (11 characters).

*OR,*

Bearing and distance from the nearest significant point, as follows:

The identification of the significant point followed by the bearing from the point in the form of 3 figures giving degrees magnetic, followed by the distance from the point in the form of 3 figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros, e.g. a point of 160° magnetic at a distance of 40 nautical miles from VOR "GS" should be expressed as GS160040.

*OR,*

The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

- DEST/ Name and location of destination aerodrome, if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under DEP/ above.
- DOF/ The date of flight departure in a six figure format (YYMMDD, where YY equals the year, MM equals the month and DD equals the day).
- REG/ The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in Item 7.
- EET/ Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority.  
Examples: EET/YBBB0010 NZZO0123 NZZC0211
- SEL/ SELCAL Code, for aircraft so equipped.
- TYP/ Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if ZZZZ is inserted in Item 9.  
Example: TYP/5CT4
- CODE/ Aircraft address (expressed in the form of an alphanumerical code of six hexadecimal characters) when required by the appropriate ATS authority. Example: "F00001" is the lowest aircraft address contained in the specific block administered by ICAO.
- DLE/ Enroute delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four figure time in hours and minutes (hhmm).  
Example: DLE/NISET0030
- OPR/ ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.
- ORGN/ The originator's 8 letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.

*Note.— In some areas, flight plan reception centres may insert the ORGN/ identifier and originator's AFTN address automatically.*

- PER/ Aircraft performance data, indicated by a single letter as specified in the *Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume I — Flight Procedures*, if so prescribed by the appropriate ATS authority.
- ALTN/ Name of destination alternate aerodrome(s), if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.
- RALT/ ICAO four letter indicator(s) for en-route alternate(s), as specified in Doc 7910, *Location Indicators*, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP above.
- TALT/ ICAO four letter indicator(s) for take-off alternate, as specified in Doc 7910, *Location Indicators*, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.
- RIF/ The route details to the revised destination aerodrome, following by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to reclearance in flight.  
Example: RIF/AA H211 NZHN
- RMK/ Any other plain language remarks when required by the appropriate ATS authority or deemed necessary.