

- 2. No PBN/ code needs to be filed to indicate the ability to fly point-to-point routes using GNSS or INS.
- 3. Filing one of these four area navigation capabilities as shown does not indicate performance based navigation sufficient for flying Q-Routes, T-Routes, or RNAV SIDs or STARs. To qualify for these routes, see the section on Performance Based Navigation Routes.

(c) Transponder Capabilities (Item 10b)

- For domestic flights, it is not necessary to indicate Mode S capability. It is acceptable to simply file one of the following codes in TBL 4-8.

**TBL 4-8
Mode C**

Capability	Item 10b
Transponder with no Mode C	A
Transponder with Mode C	C

- International flights must file in accordance with relevant AIPs and regional supplements. Include one of the Mode S codes in TBL 4-9, if appropriate.

NOTE-

File only one transponder code.

**TBL 4-9
Mode S**

Capability	Aircraft ID	Altitude Encoding	Item 10b
Mode S Transponder	No	No	X
Mode S Transponder	No	Yes	P
Mode S Transponder	Yes	No	I
Mode S Transponder	Yes	Yes	S
Mode S Transponder with Extended Squitter	Yes	Yes	E
Enhanced Mode S Transponder	Yes	Yes	H
Enhanced Mode S Transponder with Extended Squitter	Yes	Yes	L

(d) ADS-B Capabilities (Item 10b, Item 18 SUR/ and Item 18 CODE/)

- Indicate ADS-B capability as shown in TBL 4-10. The accompanying entry in Item 18 indicates that the equipment is compliant with 14 CFR §91.227. Some ADS-B equipment used in other countries is based on an earlier standard and does not meet U.S. requirements.
- Do not file an ADS-B code for “in” capability only. There is currently no way to indicate that an aircraft has “in” capability but no “out” capability.
- For aircraft with ADS-B “out” on one frequency and “in” on another, include only the ADS-B “out” code. For example, B1 or U1, (See TBL 4-10).

**TBL 4-10
ADS-B Capabilities**

Capability	Item 10b	Item 18 SUR/
1090 ES Out Capability	B1	A2
1090 ES Out and In Capability	B2	A2
UAT Out Capability	U1	A2
UAT Out and In Capability	U2	A2