

E. TASK**NATIONAL AIRSPACE SYSTEM****OBJECTIVE**

To determine that the applicant exhibits instructional knowledge of the elements of the national airspace system by describing:

KEY ELEMENTS

- Definitions and dimensions of class A, B, C, D, E and G airspace
- Pilot certification, weather, and equipment requirements for operating in each air space
- Special use airspace and other airspace areas

SCHEDULE

- Discuss lesson objectives
- Present lecture
- Questions
- Homework

EQUIPMENT

- FAR/AIM
- Local VFR chart
- References
 - 14 CFR part 91
 - AC91-71
 - AIM

INSTRUCTOR ACTIONS

- Discuss objectives
- Review material
- Development
- Conclusion

STUDENT ACTIONS

- Participate in discussion
- Take notes

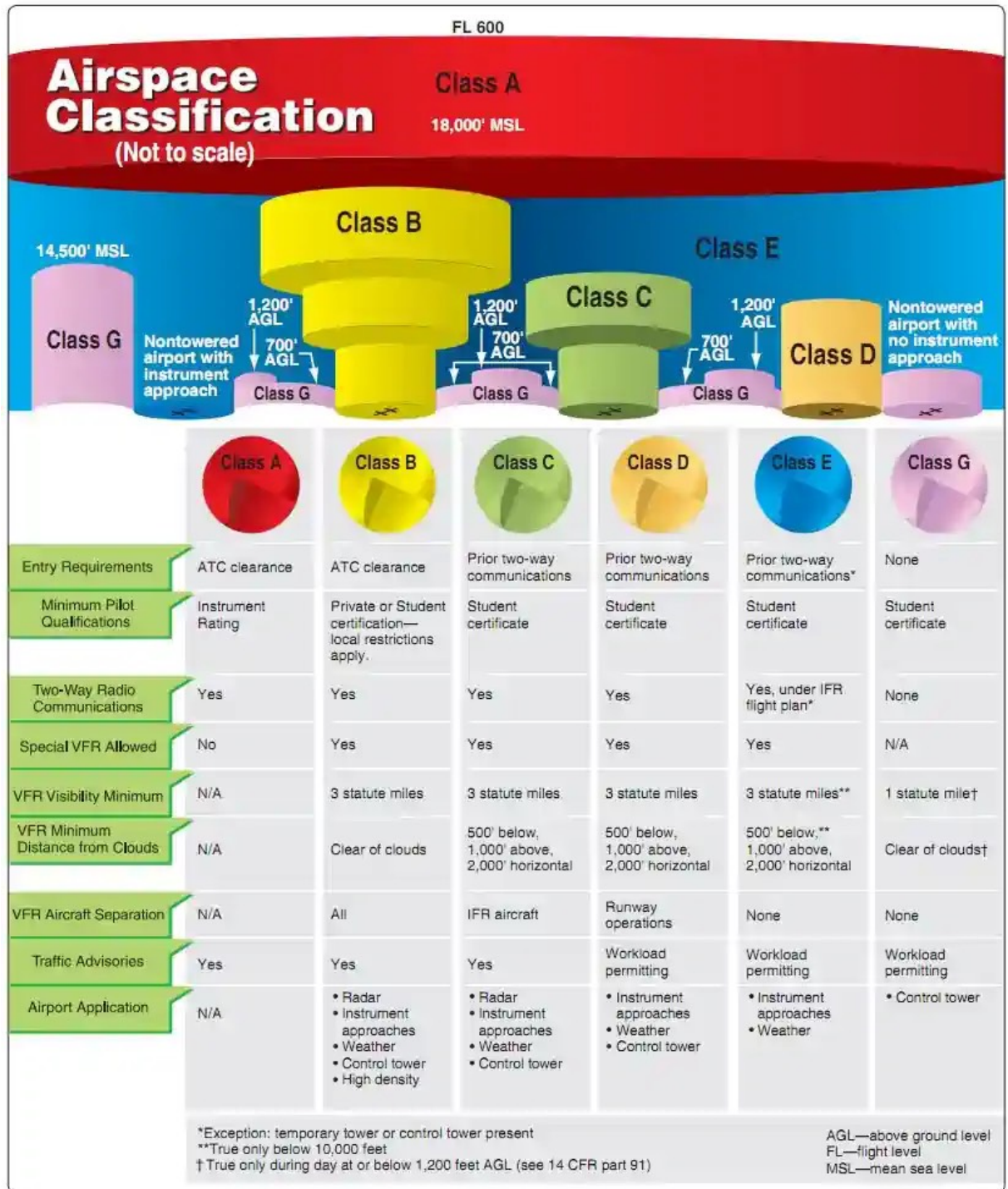
COMPLETION STANDARDS

- Participate in discussion
- Take notes

E. TASK

NATIONAL AIRSPACE SYSTEM

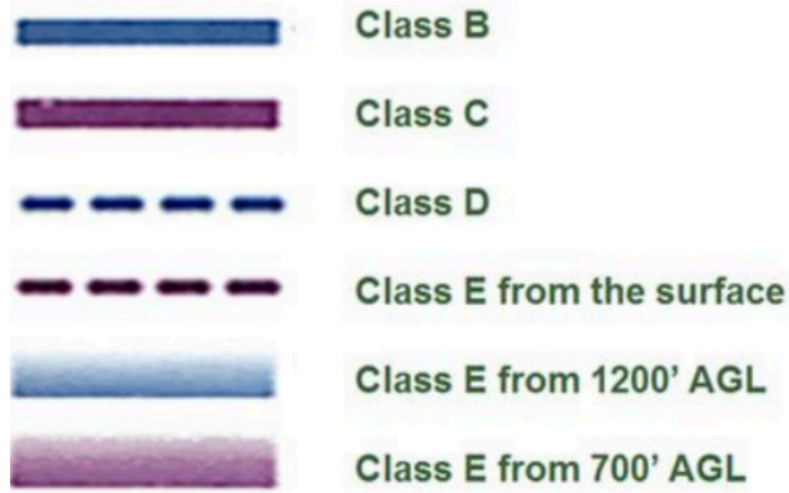
DEFINITION & DIMENSIONS



PILOT CERT

EQUIPMENT

WEATHER

E. TASK**NATIONAL AIRSPACE SYSTEM****Chart
markings****SPECIAL
USE
AIRSPACE**

Special use airspace usually consists of:

- Prohibited areas
- Restricted areas
- Warning areas
- Military operation areas (MOAs)
- Alert areas
- Controlled firing areas
- Parachute jump areas

**Controlled
fire areas**

Except for controlled firing areas, special use airspace areas are depicted on visual sectional charts. Controlled firing areas are not charted because their activities are suspended immediately when spotter aircraft, radar, or ground lookout positions indicate an aircraft might be approaching the area.

Nonparticipating aircraft are not required to change their flightpaths. Special use airspace areas are shown in their entirety (within the limits of the chart), even when they overlap, adjoin, or when an area is designated within another area. The areas are identified by type and identifying name or number, positioned either within or immediately adjacent to the area.

E. TASK**NATIONAL AIRSPACE SYSTEM****Prohibited
Restricted
Warning****Prohibited Areas**

Prohibited areas contain airspace of defined dimensions within which the flight of aircraft is prohibited. Such areas are established for security or other reasons associated with the national welfare. These areas are published in the Federal Register and are depicted on sectional charts. The area is charted as a “P” followed by a number

Restricted Areas

Restricted areas are areas where operations are hazardous to nonparticipating aircraft and contain airspace within which the flight of aircraft, while not wholly prohibited, is subject to restrictions. Activities within these areas must be confined because of their nature, or limitations may be imposed upon aircraft operations that are not a part of those activities, or both. Restricted areas denote the existence of unusual, often invisible, hazards to aircraft (e.g., artillery firing, aerial gunnery, or guided missiles). Penetration of restricted areas is illegal without authorization from the using or controlling agency may be extremely hazardous to the aircraft and its occupants. ATC facilities apply the following procedures:

1. If the restricted area is not active and has been released to the Federal Aviation Administration (FAA), the ATC facility will allow the aircraft to operate in the restricted airspace without issuing specific clearance for it to do so.
2. If the restricted area is active and has not been released to the FAA, the ATC facility will issue a clearance which will ensure the aircraft avoids the restricted airspace.

Restricted areas are charted with an “R” followed by a number

E. TASK**NATIONAL AIRSPACE SYSTEM****Prohibited
Restricted
Warning
(Continued)****Warning Areas**

Warning areas consist of airspace which may contain hazards to nonparticipating aircraft in international airspace. The activities may be much the same as those for a restricted area. Warning areas are established beyond the three-mile limit and are depicted on sectional charts.

SPECIAL USE AIRSPACE ON SAN FRANCISCO SECTIONAL CHART				
Unless otherwise noted altitudes are MSL and in feet. Time is local. "TO" an altitude means "To and including." FL - Flight Level NO A/G - No air to ground communications. Contact nearest FSS for information.			† Other times by NOTAM. NOTAM - Use of this term in Restricted Areas indicates FAA and DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.	
U.S. P-PROHIBITED, R-RESTRICTED, A-ALERT, W-WARNING, MOA-MILITARY OPERATIONS AREA				
NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
R-2513	TO FL 240	CONTINUOUS	OAKLAND CNTR	128.7 307.0
R-2531	TO BUT NOT INCL 4000	1000-2050 MON-FRI OCNL SAT & SUN WHEN ACTIVATED BY NOTAM 24 HRS IN ADVANCE	NORCAL TRACON	123.85 278.3
R-4803	TO BUT NOT INCL FL 180	0715-2330	OAKLAND CNTR	128.8 285.5 (N,E) 125.75 319.8 (S,W)
R-4804 A	TO BUT NOT INCL FL 180	0715-2330	OAKLAND CNTR	125.75 319.8
R-4810	TO 17,000	0715-2330	OAKLAND CNTR	125.75 319.8

**Military
Operating
Airspace
(MOA)****Military Operations Areas (MOAs)**

MOAs consist of airspace of defined vertical and lateral limits established for the purpose of separating certain military training activity from IFR traffic. There is no restriction against a pilot operating VFR in these areas; however, a pilot should be alert since training activities may include acrobatic and abrupt maneuvers. MOAs are depicted by name and with defined boundaries on sectional, VFR terminal area, and en route low altitude charts and are not numbered (e.g., "CHURCHILL HIGH MOA," "CHURCHILL LOW MOA"). MOA is further defined on sectional charts with times of operation, altitudes affected, and the controlling agency frequency for the MOA to contact for current activity.

E. TASK**NATIONAL AIRSPACE SYSTEM****Military
Operating
Airspace
(MOA)
(Continued)****MILITARY OPERATIONS
AREA (MOA)**

MOA NAME	ALTITUDE*	TIME OF USE†	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
AUSTIN 1	200 AGL	0800-2100 MON-FRI	OAKLAND CNTR SALT LAKE CITY CNTR	128.8 285.5 132.25 338.35
BISHOP	200 AGL	0600-2200 MON-FRI	LOS ANGELES CNTR	
CARSON	500 AGL	0715-2330	OAKLAND CNTR	128.8 285.5
CHINA	3000 AGL	0800-SS	OAKLAND CNTR	132.2 350.3
CHURCHILL HIGH	9000	0715-2245 MON-FRI 0800-1800 SAT	OAKLAND CNTR	
CHURCHILL LOW	500 AGL TO 9000	0715-2245 MON-FRI 0800-1800 SAT	OAKLAND CNTR	
FOOTHILL 1	2000 AGL	INTERMITTENT BY NOTAM	OAKLAND CNTR	123.8 353.8
FOOTHILL 2	2000 AGL	INTERMITTENT BY NOTAM	OAKLAND CNTR	123.8 353.8 (N,W)
GABBS CENTRAL	100 AGL	0715-2330	OAKLAND CNTR	125.75 319.8 (N,S,W)
GABBS NORTH	100 AGL	0715-2330	OAKLAND CNTR	128.8 285.5 (N,W) 125.75 (S)
GABBS SOUTH	100 AGL	0715-2330	OAKLAND CNTR	125.75 319.8 (N,S,W)
HUNTER HIGH	11,000	INTERMITTENT BY NOTAM	OAKLAND CNTR	126.9 343.8
HUNTER LOW A	200 AGL TO BUT NOT INCL 11,000	INTERMITTENT BY NOTAM	OAKLAND CNTR	128.7 307.0
HUNTER LOW D	1500 AGL TO 6000	INTERMITTENT BY NOTAM	OAKLAND CNTR	128.7 307.0
ISABELLA	200 AGL	0600-2200 MON-FRI	JOSHUA APP	133.65

E. TASK**NATIONAL AIRSPACE SYSTEM****Alert Areas****Alert areas**

are depicted on sectional charts with an “A” followed by a number, ex: “A-211” to inform nonparticipating pilots of areas that may contain a high volume of pilot training or an unusual type of aerial activity. Pilots should be particularly alert when flying in these areas. All activity within an alert area shall be conducted in accordance with regulations, without waiver. Pilots of participating aircraft, as well as pilots transiting the area, shall be equally responsible for collision avoidance.

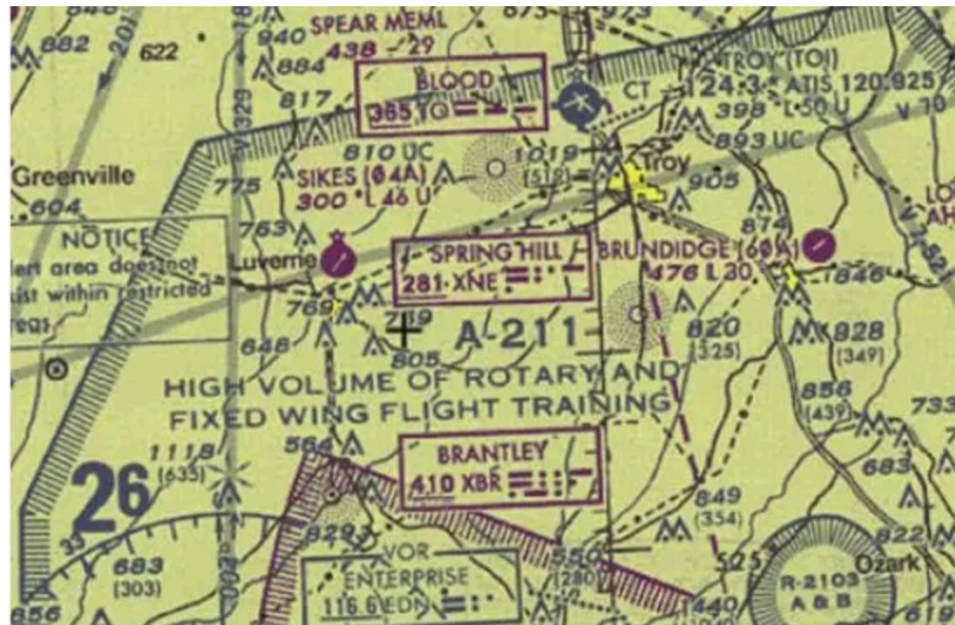


Figure 8-16. Alert area (A-211).

**Parachute
Jumping
Areas****Parachute Jump Areas**

Parachute jump areas are published in the Airport/ Facility Directory (A/FD). Sites that are used frequently are depicted on sectional charts. Each pilot should listen to the appropriate airport radio frequency for parachute operations and be alert for aircraft which might be conducting parachute operations.