Towered and Non-Towered Airports

The definition for airports refers to any area of land or water used or intended for landing or takeoff of aircraft. This includes special types of facilities including seaplane bases, heliports, and facilities to accommodate tilt rotor aircraft. An airport includes an area used or intended for airport buildings, facilities, as well as rights of way together with the buildings and facilities.

There are two types of airports: *towered and non-towered*. These types can be further subdivided to:

Civil Airports: airports that are open to the general public.

Military/Federal Government Airports: airports operated by the military, National Aeronautics and Space Administration (NASA), or other agencies of the Federal Government.

Private Airports: airports designated for private, restricted, or emergency use only, not open to the general public.

Towered Airport

A towered airport has an operating control tower, and the air traffic control (ATC) is responsible for providing the safe, orderly, and expeditious flow of air traffic at airports where the type of operations and/or volume of traffic requires such a service.

Sources for Airport Data

When a remote pilot operates in the vicinity of an airport, it is important to review the current data for that airport such as communication frequencies, the airport services available, closed runways, whether an airport is under construction, or other important pertinent information. Four common sources of information are:

- **Aeronautical Sectional Charts**
- **Chart Supplement U.S. (formerly Airport/Facility Directory)**
- **Notice to Airmen (NOTAMs)**
- **Automated Terminal Information Services (ATIS)**

The Chart Supplement U.S. (formerly Airport/Facility Directory) provides the <u>most comprehensive</u> information on a given airport as it contains information on airports, heliports, and seaplane bases that are open to the public. The Chart Supplement U.S. is published in seven books, which are organized by regions and revised every 56 days, are available online at the FAA website www.faa.gov/air_traffic/flight_info/aeronav, but also more readily available at SkyVector.com.

The FAA publication that provides the aviation community with <u>basic flight</u> information and Air Traffic Control procedures for use in the National Airspace System of the United States is the Aeronautical Information Manual (AIM).

SAVANNAH/HILTON HEAD INTL (SAV)(KSAV) P (ANG)   7 NW   UTC–5(–4DT)   N32°07.66′   **ATLANTA**
W81°12.13′   **H–9B, 12G, L–24H**
50   B   TPA—See Remarks   LRA   Class I, ARFF Index C   NOTAM FILE SAV   **IAP, AD**
RWY 10–28: H9351X150 (CONC–GRVD)   S–75, D–190, 2S–175,
2D–310 PCN 70 R/C/W/T   HIRL   CL
RWY 10: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 69′. RVR–TM
0.5% up.
RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 66′. RVR–MR
RWY 01–19: H7002X150 (CONC–GRVD)   S–75, D–190, 2S–175,
2D–310 PCN 70 R/C/W/T   HIRL
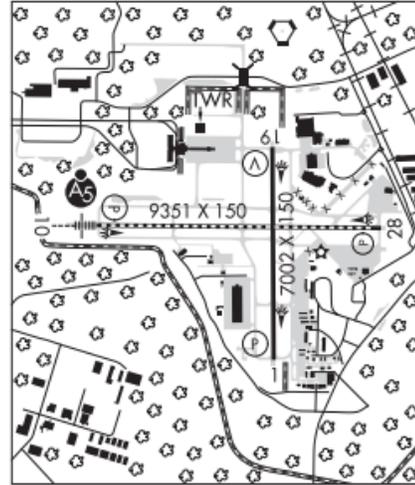RWY 01: PAPI(P4L)—GA 3.0° TCH 74′. RVR–TM
RWY 19: REIL. VASI(V4R)—GA 3.0° TCH 52′. RVR–MR

LAND AND HOLD–SHORT OPERATIONS

LDG RWY	HOLD–SHORT POINT	AVBL LDG DIST
RWY 01	10–28	4050
RWY 10	01–19	5450
RWY 28	01–19	3250

RUNWAY DECLARED DISTANCE INFORMATION

	TORA	TODA	ASDA	LDA
RWY 01:	7002	7002	7002	7002
RWY 10:	9351	9351	9351	9351
RWY 19:	7002	7002	7002	7002
RWY 28:	9351	9351	9351	9351

ARRESTING GEAR/SYSTEM

RWY 10 BAK–14 BAK 14A(B) (1500FT)   BAK–14 BAK 14A(B) (1977 FT) **RWY 28**

SERVICE: S4   **FUEL** 100LL, JET A, A++   **OX** 1, 2, 3, 4   **LGT** When twr clsd ACTIVATE HIRL Rwy 01–19 and Rwy 10–28, REIL Rwy 19 and Rwy 28 and MALSR Rwy 10—CTAF. VASI Rwy 19 and PAPI Rwy 01, Rwy 10 and Rwy 28 opr continuously. MALSR Rwy 10 NSTD, spacing does not meet FAA stds. **MILITARY—A–GEAR** BAK–12A cable raised by BAK–14 device O/R to Twr. **FUEL** A, A+ (Avbl 1100–0300Z‡ C912–964–1557, OT 2 hr PN, C912–313–6310. Svc fee.) A++, A++100(MIL), (NC–100LL)   **TRAN ALERT** Tran acft prohibited when tran alert unavbl. Fleet svc unavbl.

AIRPORT REMARKS: Attended 1100–0400Z‡. Birds and deer on and invof arpt. BASH phase II 01 Oct–30 Apr. No 180° turns on asph for acft over 12,500 lbs gross. Rwy 01–19 ctr 75′ keel section of rwy conc full length, last 500′ conc, full width, both ends. All twy int conc exc Twy B at the North end of the rwy and Twy B2. Remainder of Rwy 01–19 asph. Rwy 10–28 ctr 75′ keel section conc full length, all twy int conc exc Twy C2 and C3. Remainder of Rwy 10–28 asph. Twy B2 Twy C2 are ltd to 12,500 lbs. South general aviation apron open to acft with wingspan greater than 95′ via Twy D. Twy A, Twy B, Twy C, Twy D, Twy E, Twy F, Twy G and Twy H are ltd to dual wheel acft up to 173,000 lbs and dual tandem wheel acft up to 310,000 lbs. Twy E clsd from Rwy 28 to but not incld Twy E2 to acft with wingspan of 175′ or greater. Twy E2 connector clsd to acft ldg Rwy 28. Acft/vehicles on the south end of Twy A and the east end of Twy E not visible from the ATCT. Distance from touchdown too short for safe turn. TPA—Jet and turbo prop 1550(1500), twin and single engine 1050(1000) overhead 2050 (2000). Helicopter 550(500), Mil jet overheads 2050(2000). PPR for parking of general aviation acft on the air carrier terminal ramp ctc 912–964–7501. Rwy 01 no RVR when twr clsd. Rwy 19 no RVR when twr clsd. Rwy 28 no RVR when twr clsd. Flight Notification Service (ADCUS) avbl.

MILITARY REMARKS: ANG Combat Readiness Trng Ctr (CRTC)/ANG: rstd all acft. Ctc base ops DSN 860–3145/3497 C912–963–3145/3497. PPR issued up to 71 hr prior to arrival, good for +/–1 hr. Coordinate PPR outsideof block time by phone is rqr or req will be considered cnl. Duty hr 1230–2100Z‡ Mon–Fri, clsd Sat, Sun, hol, avbl weekend for HHQ mission with 24 hr prior notice to AMOPS.

AIRPORT MANAGER: 912-964-0514
WEATHER DATA SOURCES: ASOS (912) 966–0364 **HIWAS** 115.95 SAV. LAWRS. LLWAS.
COMMUNICATIONS: CTAF 119.1   **ATIS** 123.75   **UNICOM** 122.95
RCO 122.1R 116.0T (MACON RADIO)
RCO 123.65 (MACON RADIO)
® **APP/DEP CON** 118.4 (270°–10°) 120.4 (110°–269°) 125.3 (11°–109°) (1100–0500Z‡)
JAX CENTER APP/DEP CON 132.925 (11°–109°) (0500–1100Z‡)
TOWER 119.1 (1100–0500Z‡)   **GND CON** 121.9   **CLNC DEL** 119.55
AIRSPACE: CLASS C svc ctc **APP CON** svc 1100–0500Z‡ other times CLASS E.

Chart Supplement U.S.

This is a detailed example of a Chart Supplement U.S. from Savannah Hilton Head International Airport in Georgia, which was obtained from SkyVector.com. The Chart Supplement contains a bevy of information that is beneficial to the remote pilot providing information from UNICOM frequencies to current activities within or surrounding the airport facility.

Under Airport Remarks, you can read that there is some bird and deer activity, along with some runway construction as well. If you were operating near this airport, this information would be helpful in determining which direction aircraft may be more-likely to be landing from. Specifically, regarding the exam, there may also be some questions asking you to identify which UNICOM or CTAF frequencies are being used at a particular airport.

Automated Terminal Information Service (ATIS)

The Automated Terminal Information Service (ATIS) is a recording of the local weather conditions and other pertinent non-control information broadcast on a local frequency in a looped format. It is normally updated once per hour but is updated more often when changing local conditions warrant. Important information is broadcast on ATIS including weather, runways in use, specific ATC procedures, and any airport construction activity that could affect taxi planning.

When the ATIS is recorded, it is given a code. This code is changed with every ATIS update such as, ATIS Alpha is replaced by ATIS Bravo. The next hour, ATIS Charlie is recorded, followed by ATIS Delta and progresses down the alphabet.

You can find the ATIS frequency using an online sectional chart or by using a Chart Supplement U.S., and the frequencies can also be found at https://www.faa.gov/air_traffic/weather/asos/.

Non-towered Airport

A non-towered airport does not have an operating control tower. Two-way radio communications are not required, although it is a good operating practice for pilots to monitor other aircraft on the specified frequency for the benefit of other traffic in the area. Pilots commonly use special VHF radio frequencies by locating the Common Traffic Advisory Frequency (CTAF) for a particular airport. The CTAF may be a Universal Integrated Community frequency (UNICOM), MULTICOM, or Flight Service Station (FSS) frequency, and is identified in appropriate aeronautical publications and also on SkyVector.com.

UNICOM stations may provide pilots, upon request, with weather information, wind direction, the recommended runway, or other necessary information. If the UNICOM frequency is designated as the CTAF, it will be identified in appropriate aeronautical publications with a "C" inside a blue dot.

An FSS (Flight Service Station) is physically located on an airport and may provide airport advisory service (AAS) at an airport that does not have a control tower, or where a tower is operated on a part-time basis and the tower is not in operation. The CTAFs for FSSs which provide this service are published in appropriate aeronautical publications.

MULTICOM is a mobile service not open to public correspondence use, used for essential communications in the conduct of activities performed by or directed from private aircraft.

Common UNICOM frequencies are 122.8 MHz, 122.7 MHz and 123.0 MHz but more recently, FAA approved four additional frequencies which are 122.725 MHz, 122.975 MHz, 123.050 MHz, and 123.075 MHz.

Runway Markings and Signage
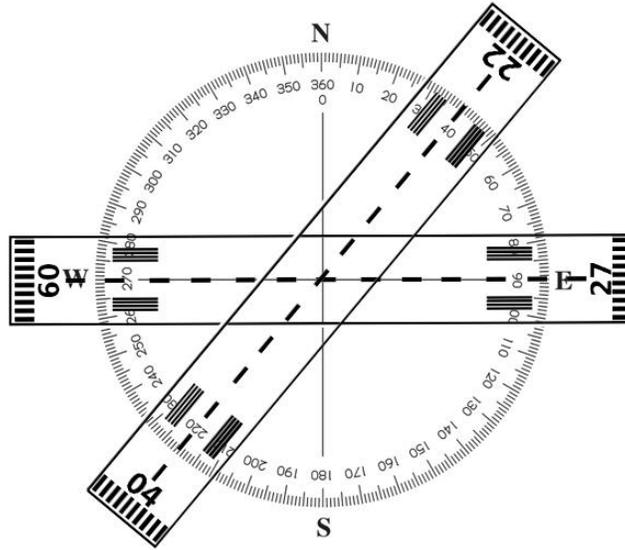
Runways are numbered 1 through 36 to correlate with the 360° of a magnetic compass but the numbers are shortened to correspond to the airport's magnetic alignment. Runways are numbered based upon the direction the pilot is landing.

For example, runway zero-four (04) runs southeast to northeast and corresponds to 40⁰ on the compass.

- Runway zero-niner (09) runs west to east and corresponds to 90° on the compass.
- Runway two-two (22) runs northeast to southwest and corresponds to 220° on the compass.
- Runway two-seven (27) runs east to west and corresponds to 270° on the compass.
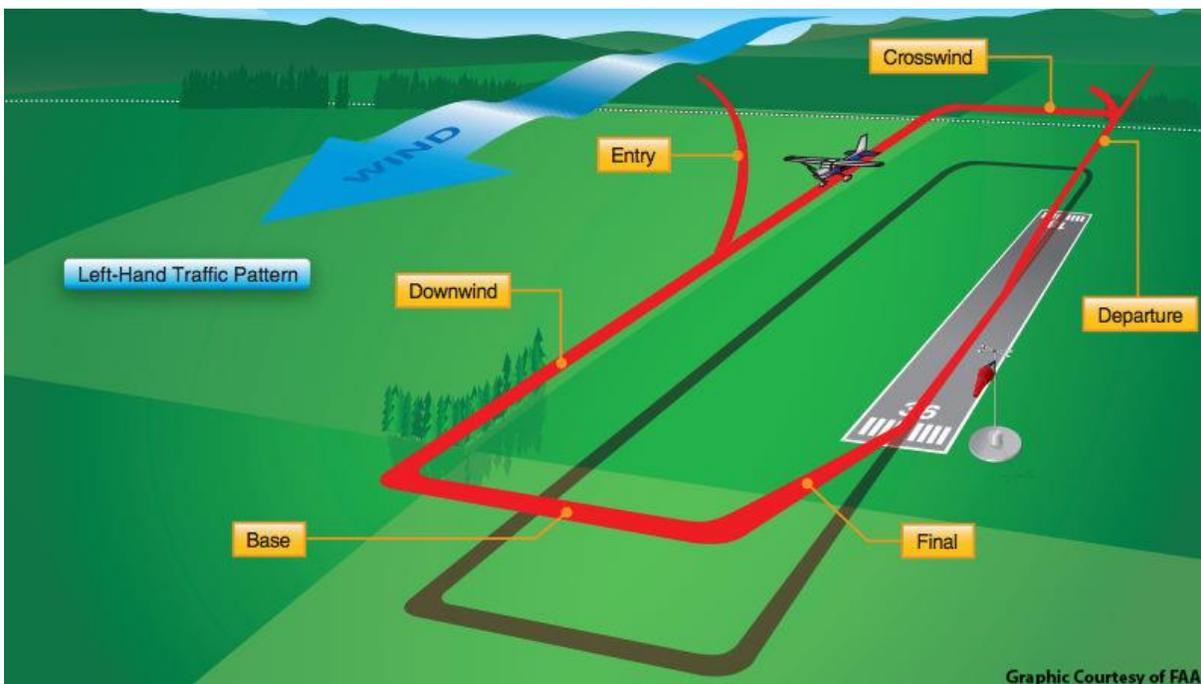
When operating at a non-towered airport, all turns should be made to the left unless otherwise specified in the sectional aeronautical chart. If the pilot makes an announcement on approach to landing at runway three-six (36), the pilot might announce: "...midfield left downwind to runway three six." This would mean the aircraft is west of the runway on a 180° parallel course to the landing, flying south to approach and land in a northern direction.

Pilots could also announce their location on approach to land when they are in the base leg or final approach leg. The final approach leg can also be referred to as the "short final." There could be any combination of similar questions on your Knowledge Exam.

Here is another example depicting a landing onto runway zero-four. You might hear the pilot state: "midfield left downwind to runway zero-four" which means the pilot is <u>west</u> of the runway heading south, to make a left turn and land from the south. Again, manned aircraft should enter a landing traffic pattern at a proper altitude, entering 45° at the midpoint of the downwind leg. It is not recommended to enter a traffic pattern at the same time you're descending and should be avoided.
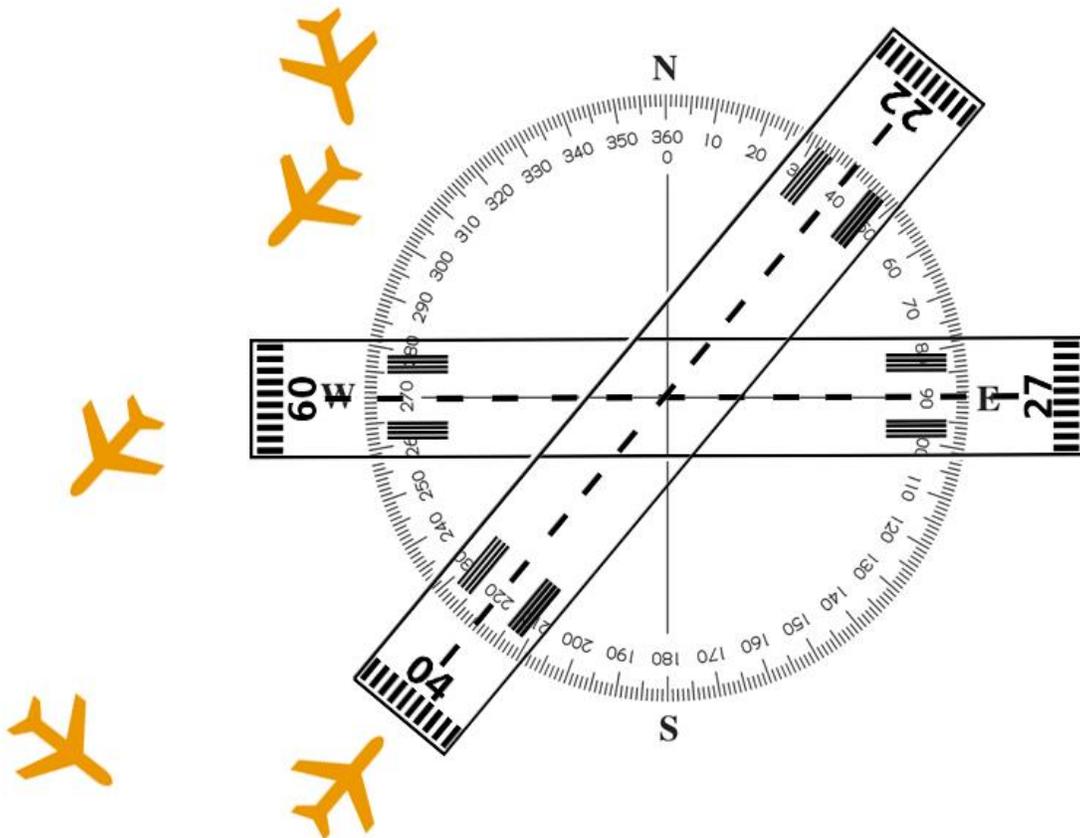
The FAA wants all pilots to know that most mid-air collisions occur within the vicinity of an airport on clear days, and not cloudy days. This clearly indicates how critical it is that pilots pay strict attention to all surroundings, and to follow proper procedures at all times. So it's best to familiarize yourself with traffic patterns in regards to the directional compass, as there will likely be some questions pertaining to landings and approaches on the part 107 exam.

Report Wildlife Strikes or Accidents

The FAA has long recognized the threat to aviation safety posed by wildlife strikes and has initiated several programs to address this important safety issue, including the collection, analysis, and dissemination of wildlife strike data. A remote pilot should report any strike to any type of bird, flying mammal, or a terrestrial mammals large than 1 kg (i.e.: rabbit, fox, domestic dogs or cats, but not rats mice, chipmunks or shrews). Accidents can be reported at https://wildlife.faa.gov/strikenew.aspx or by completing form 5200-7.

Secure Identification Display Areas (SIDA)

The FAA wants remote pilots to understand that certain areas at an airport require special security clearance and an SIDA badge. Your part 107 may have a simple question regarding the SIDA badge.

Right of Way Rules

As previously mentioned, 14 CFR states that a remote pilot cannot operate an sUAS in a manner that interferes with operations and traffic patterns at any airport, heliport, or seaplane base, including controlled and uncontrolled airspace. Remote pilots must remain clear of, and yield right-of-way to, all other aircraft. The FAA refers to this as See and Avoid.

To comply with See and Avoid requirements, a remote PIC cannot use a first-person view camera or binoculars to assist, as only a remote pilot's diligence or own natural unaided eyesight efforts may be used (glasses and contacts are acceptable). In all circumstances, the remote pilot in command must give way to helicopters, gliders, powered parachutes, parachutists, and manned or unmanned balloons as well. If the remote pilot is operating a fixed-wing unmanned aircraft, and his/her aircraft is approaching another similarly-sized fixed-wing unmanned aircraft, *both pilots should alter course always turning right to avoid a potential accident.*

Remote pilots should properly scan for other aircraft in the sky by systematically focusing on different segments of the sky for short intervals; scanning from left to right in intervals of no more than 10°, with each area being observed for at least one second to be sure you can enable detection. In larger-scaled flight operations, it's very common to have 1 to 3 visual observers assisting the remote PIC.

~ End