



AC NO: 90-66

DATE: 2/27/75

ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

TAD494, 4

SUBJECT: RECOMMENDED STANDARD TRAFFIC PATTERNS FOR AIRPLANE OPERATIONS
AT UNCONTROLLED AIRPORTS

1. PURPOSE. This circular calls attention to regulatory requirements for the operation of airplanes at uncontrolled airports. It recommends voluntary use of standard traffic pattern flight procedures at uncontrolled airports where such use is not in conflict with existing procedures in effect at those airports.
 2. REFERENCES. The following Advisory Circulars also contain information applicable to operations at uncontrolled airports.
 - a. AC 90-42A, Traffic Advisory Practices at Non Tower Airports.
 - b. AC 90-61, Practice Instrument Approaches.
 3. DEFINITION. For the purpose of this Advisory Circular, "uncontrolled airport" means an airport without an operating control tower.
 4. BACKGROUND AND SCOPE.
 - a. At the present time, regulatory provisions relating to traffic patterns are found in Parts 91 and 93 of the Federal Aviation Regulations. The airport traffic patterns contained in Part 93 relate primarily to those airports where there was a need for traffic pattern procedures over and above those provided for in Part 91. At uncontrolled airports, Part 91 requires only that pilots of airplanes approaching to land make all turns to the left unless light signals or visual markings indicate that turns should be made to the right.
 - b. The FAA believes that voluntary observance of the standard traffic pattern procedures detailed in this circular will improve the safety and efficiency of airplane operations at uncontrolled airports. This objective can be realized through voluntary participation by ALL pilots to the fullest extent possible.
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5. GENERAL OPERATING PRACTICES:

- a. While use of the recommended standard traffic pattern is encouraged at all uncontrolled airports, it is recognized that other traffic patterns may already be in common use at some airports, or that special circumstances or conditions exist which may prevent use of the standard traffic pattern. It is not intended that this Advisory Circular result in arbitrary changes to existing traffic patterns for the purpose of standardization alone.
- b. The use of any traffic pattern procedure does not alter the responsibility of each pilot to see and avoid other aircraft.
- c. As a part of his preflight familiarization with all available information concerning a flight, each pilot should review appropriate publications (AIM and state airport directories, etc.), for pertinent information on current traffic patterns at his intended points of landing.
- d. At uncontrolled airports approved for air carrier operations, pilots should be particularly alert for carrier airplanes executing straight-in approaches. Air/ground communication with Flight Service Stations (FSS) providing airport advisory service or a "ramp-mike" operator is required at all uncontrolled airports having air carrier operations. Straight-in approaches are completed only when the pilot in command determines, in close coordination with the Flight Service Stations or the "ramp-mike" operator, that the arrival will not disrupt or otherwise endanger the flow of other arriving and departing traffic.
- e. Because voluntary participation is so essential, we encourage all operators to look carefully at the need for straight-in approaches, especially when weather and traffic conditions are such that the normal traffic pattern entry will insure the maximum degree of safety.
- f. Pilots who wish to practice instrument approaches at uncontrolled airports should make every effort to avoid those periods of the day when traffic is moderate to heavy, and should be particularly alert for other aircraft in the pattern so as to avoid interrupting the flow of traffic. Again, pilots using the traffic pattern should be alert for straight-in traffic.

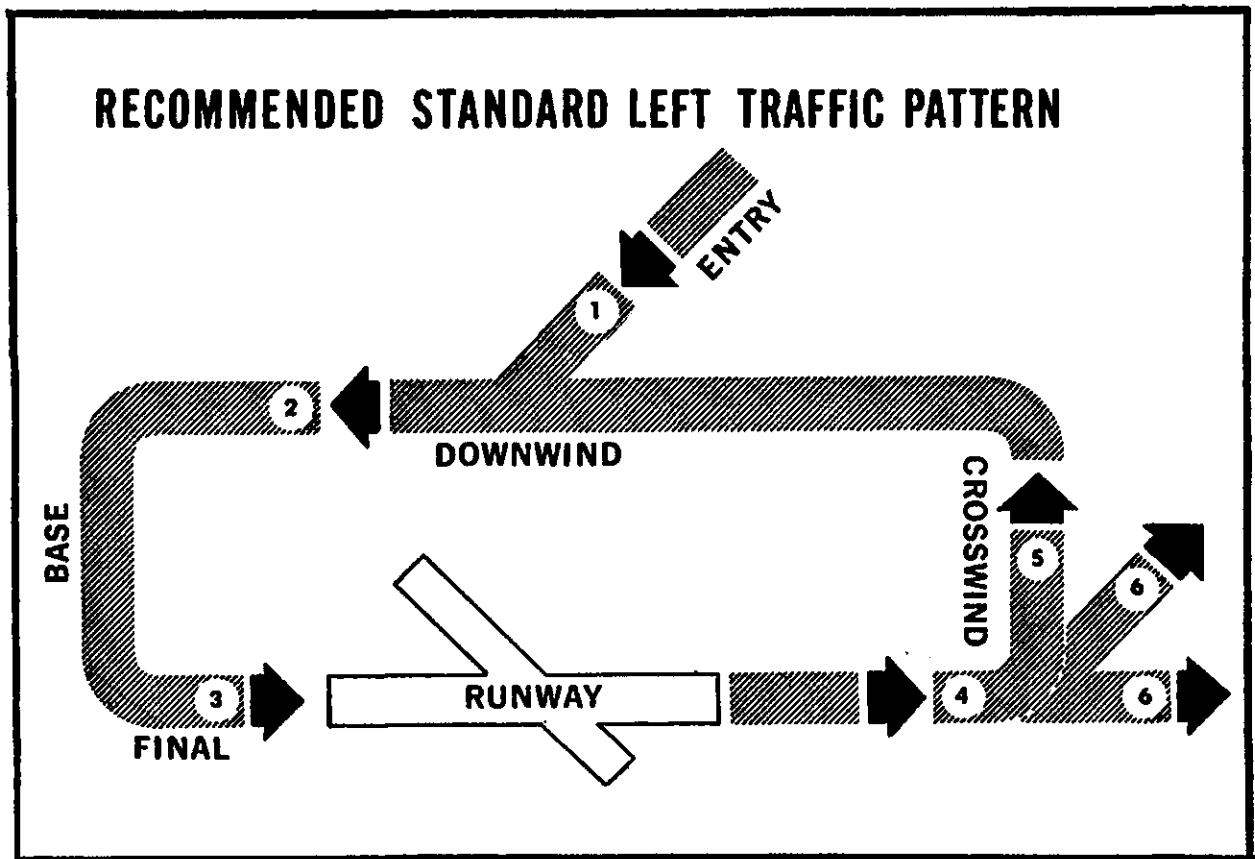
6. RECOMMENDED STANDARD TRAFFIC PATTERN. Appendix 1 diagrams a recommended standard left traffic pattern applicable to all airport runways, unless the airport displays approved light signals or visual markings indicating use of a standard right traffic pattern (Appendix 2).

- a. Airplanes entering the traffic pattern at an uncontrolled airport should avoid the flow of traffic until established on the entry leg.

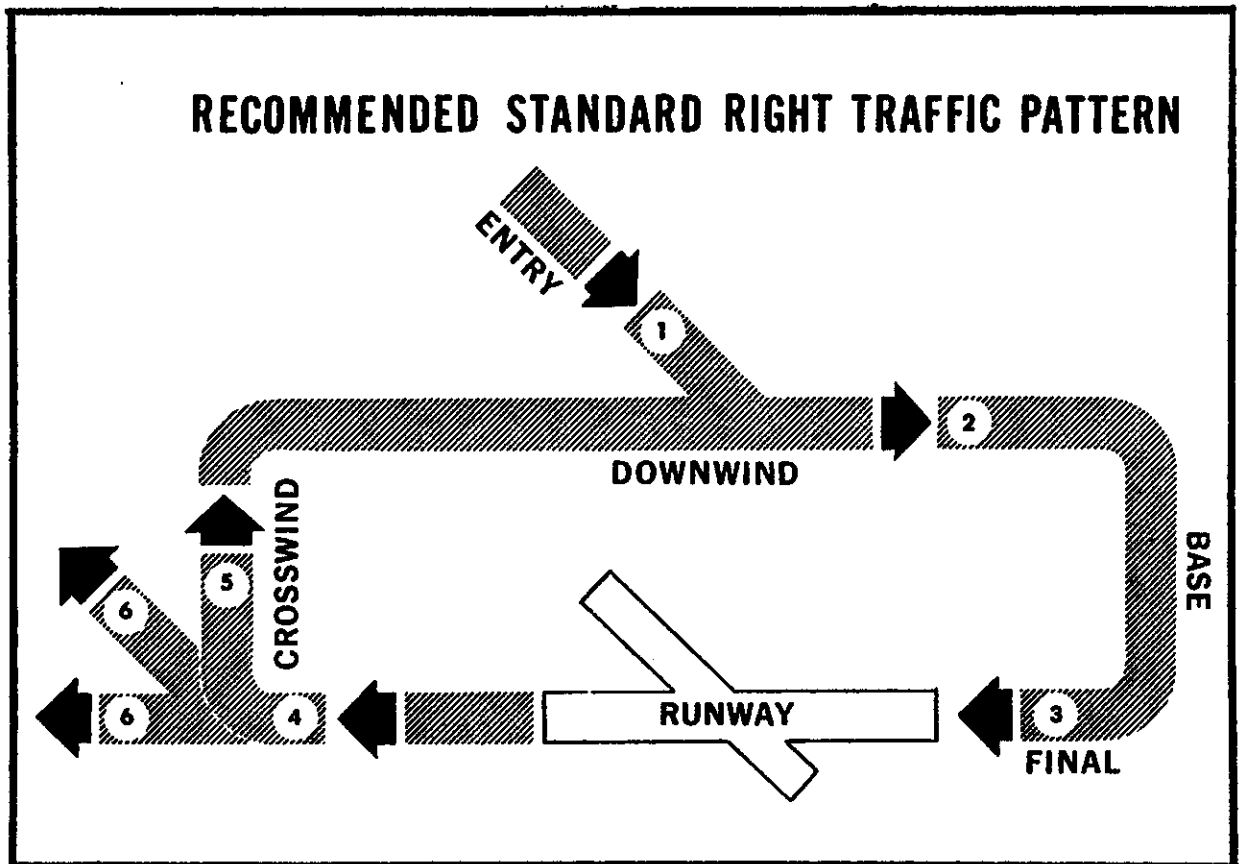
- b. Arriving airplanes should be at traffic pattern altitude before entering the standard traffic pattern, using a 45 degree angle to the downwind leg, abeam the midpoint of the runway.
 - c. It is recommended that airplanes observe a 1000 foot AGL traffic pattern altitude. Large and turbine-powered airplanes are encouraged to use a pattern which, in the opinion of the pilot in command, will provide the greatest safety margin possible, all conditions considered.
 - d. The traffic pattern altitude should be maintained until abeam the approach end of the landing runway, on downwind leg.
 - e. The downwind leg should be extended far enough to assure a final approach leg of at least 1/4 mile.
 - f. Landing and takeoff should be accomplished on the operating runway most nearly aligned into the wind. However, if another runway is used, pilots using such other runways should avoid the flow of traffic to the runway most nearly aligned into the wind.
 - g. Airplanes on takeoff or go-around should continue straight ahead until beyond the departure end of the runway.
 - h. Airplanes remaining in the traffic pattern should not commence a turn to the crosswind leg until beyond the departure end of the runway, and within 300 feet of traffic pattern altitude, ensuring that the downwind leg will be entered at traffic pattern altitude.
 - i. Airplanes departing the traffic pattern should continue straight out, or exit with a 45° left turn (right turn for right traffic pattern), when beyond the departure end of the runway, after reaching traffic pattern altitude.
 - j. Airplanes should not be operated in the traffic pattern at speeds of more than 156 knots (180 mph) if reciprocating engine powered, or 200 knots (230 mph) if turbine powered.
7. HOW TO GET THIS PUBLICATION. Order additional copies of this advisory circular from the Department of Transportation, Publications Section, TAD-443.1, Washington, D. C., 20590.



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- 1 Enter pattern in level flight, abeam the midpoint of the runway, at pattern altitude.
- 2 Maintain pattern altitude until abeam approach end of the landing runway, on downwind leg.
- 3 Complete turn to final at least 1/4 mile from runway.
- 4 Continue straight ahead until beyond departure end of runway.
- 5 If remaining in the traffic pattern, commence turn to crosswind leg beyond the departure end of the runway, within 300 feet of pattern altitude.
- 6 If departing the traffic pattern, continue straight out, or exit with a 45° left turn beyond the departure end of the runway, after reaching pattern altitude.



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- 5 If remaining in the traffic pattern, commence turn to crosswind leg beyond the departure end of the runway, within 300 feet of pattern altitude.
- 6 If departing the traffic pattern, continue straight out, or exit with a 45° right turn beyond the departure end of the runway, upon reaching pattern altitude.