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Subject:

Date:

8/2/85

AC No: 99-1B

Initiated by: ATO-330

Change:

SECURITY CONTROL OF AIR TRAFFIC

- The Advisory Circular is intended to provide civil aviation PURPOSE. with recommended practices for operating aircraft within an air defense identification zone (ADIZ) or when penetrating an air defense identification zone. It also provides information on actions to be taken by airmen when operating an aircraft during an air defense emergency/defense emergency or prior to these declarations, when area/regional emergency security control of air traffic (ESCAT) procedures are implemented.
- 2. CANCELLATION. Advisory Circular No. 99-1A dated February 27, 1978.

3. REFERENCES.

- Federal Aviation Act of 1958, Section 1202,
- Federal Aviation Regulations, Part 99.

DISCUSSIONS.

- a. Section 1202 of the Federal Aviation Act of 1958 authorizes the Administrator, in consultation with the Department of Defense (DOD), to establish zones or areas in the airspace of the United States as he may find necessary in the interest of national defense. By rule, regulation, or order the Administrator may find it necessary to restrict or prohibit the flight of civil aircraft which he cannot identify, locate, and control with available facilities within any such zones or areas.
- b. FAR Part 99 prescribes rules for operating civil aircraft in a defense area, or into, within, or out of the United States through a designated ADIZ. Part 99 additionally prescribes rules relating to communications and flight plan requirements, position reporting, deviations from flight plans, and deviations from ATC clearances. also relates special security control of air traffic procedures which may be implemented under certain conditions of national defense.
- c. The North American Air Defense Command (NORAD) is the principle agent of DOD responsible for the air defense of the United States. In executing its responsibility, NORAD has adopted certain procedures for movement of aircraft during emergency wartime conditions. NORAD has also promulgated certain operational requirements for aircraft entering an ADIZ and prescribed criteria for identifying aircraft operating within or penetrating any ADIZ as friendly, unknown, or hostile.

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- 5. <u>DAY-TO-DAY OPERATING PROCEDURES</u>. Airmen planning to operate aircraft within or penetrate an ADIZ, or when an advance state of Air Defense Alert exists, or when an Air Defense Emergency has been declared are to be guided by FAR 99 and the following:
- a. No person may operate an aircraft in or penetrating a Coastal or Domestic ADIZ unless he has filed a flight plan with an appropriate aeronautical facility.
- b. All flight plans must specify transponder capability unless ATC authorizes an abbreviated flight plan. If ATC cannot authorize an abbreviated flight plan, then c. and d. are required.
- c. IFR flight plan must contain the information specified in Section 91.83.
- d. VFR flight plan shall be designated as a DVFR flight plan and contain the information contained in Section 91.83(a)(1) through (7).
- e. If unable to file a DVFR flight plan the pilot must comply with Section 99.25(a)(2).
- f. Comply with all instructions received from any appropriate aeronautical facility *when an Air Defense Emergency has been declared and the procedures for SCATANA or ESCAT are in effect.
- g. Comply with all instructions received from any appropriate aeronautical facility when area/regional ESCAT is declared to be in effect by the responsible NORAD Regional Commander.
- 6. AIRCRAFT POSITION TOLERANCES. Airmen who operate or plan to operate an aircraft along a route which originates or penetrates an ADIZ are required to adhere to these NORAD aircraft position tolerances:
- a. Make good actual reporting times of five (5) minutes or less of their estimated times over each reporting point or point of penetration of an ADIZ or in the case of a flight originating within an ADIZ depart within five (5) minutes from the proposed time of departure specified in the flight plan unless the actual time of departure is reported to an appropriate aeronautical facility.
- b. Maintain distances of ten (10) nautical miles or less from the centerline of the route of flight, if the flight is entering or operating within a domestic ADIZ or twenty (20) nautical miles or less from the centerline of the route of flight, if the flight is entering or operating within a coastal ADIZ or the Alaskan Distant Early Warning Identification Zone (DEWIZ).
- * Any FAA Center/Tower/FSS or military ATC facility/military radar unit, ARINC or military communication facility.

- c. Aircraft flights which are operated in excess of specific tolerances are subject to interception to confirm their identity. The unnecessary dispatch of manned interceptors is costly to the United States. Moreover, the element of surprise to pilots, crew members, and passengers of civil aircraft may be unsettling and damaging to air commerce.
- d. Aircraft operating or planning to operate within an ADIZ may be exempted from the National Security Requirements of FAR 99 (except as may be applicable under FAR 99.7) if the aircraft is operating:
- (1) Within the 48 contiguous states and the District of Columbia or within the State of Alaska and remains within ten (10) nautical miles (NM) of its departure point.
- (2) In a coastal or domestic ADIZ north of 30 degrees north latitude or west of 86 degrees west longitude at a true air speed (TAS) of less than 180 knots.
- (3) In Alaskan DEWIZ at a TAS of less than 180 knots while pilot maintains listening watch on appropriate radio frequency.
- (4) Over or within three (3) NM of any island in the Hawaiian coastal ADIZ.
- e. Exemptions (except for FAR 99.7) may also be granted by an air route traffic control center (ARTCC) on a local basis for some operations within an ADIZ.
- 7. INTERCEPTION PROCEDURES. In the event it is determined that an air identification intercept is to be initiated against an aircraft to verify its identity, its air crew should anticipate some or all of the following sequence of events to occur.

a. General.

(1) Identification intercepts during peacetime operations are vastly different than those conducted under increased states of readiness. Unless otherwise directed by the control agency, intercepted aircraft will be identified by type only. When specified information is required (i.e., markings, serial numbers, etc.) the interceptor aircrew will respond only if the request can be conducted in a safe manner. During hours of darkness or instrument conditions, identification of unknown aircraft will be by type only. The interception pattern described below is the typical peacetime method used by air interceptor aircrews. In all situations, the interceptor aircrew will use caution to avoid startling the intercepted aircrew and/or passengers.

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b. Intercept Phases.

(1) Phase One - Approach Phase: During peacetime, intercepted aircraft will be approached from the stern. Generally, two interceptor aircraft will be employed to accomplish the identification. The flight leader and his wingman will coordinate their individual positions in conjunction with the ground controlling agency. Their relationship will resemble a line abreast formation. At night or in instrument conditions, a comfortable radar trail tactic will be used. Safe vertical separation between interceptor aircraft and unknown aircraft will be maintained at all times.

- (2) Phase Two Identification Phase: The intercepted aircraft should expect to visually acquire the lead interceptor and possibly the wingman during this phase in visual conditions. The wingman will assume a surveillance position while the flight leader approaches the unknown aircraft. Intercepted aircraft personnel may observe the use of different drag devices to allow for speed and position stabilization during this phase. The flight leader will then initiate a gentle closure toward the intercepted aircraft, stopping at a distance no closer than absolutely necessary to obtain the information needed. The interceptor aircraft will use every possible precaution to avoid startling intercepted aircrew or passengers. Additionally, the interceptor aircrews will constantly keep in mind that maneuvers considered normal to a fighter aircraft may be considered hazardous to passengers and crews of nonfighter aircraft. When interceptor aircrews know or believe that an unsafe condition exists, the identification phase will be terminated. As previously stated, during darkness or instrument conditions identification of unknown aircraft will be by type only. Positive vertical separation will be maintained by interceptor aircraft throughout this phase.
- (3) Phase Three Post Intercept Phase: Upon identification phase completion, the flight leader will turn away from the intercepted aircraft. The wingman will remain clear and accomplish a rejoin with his leader.
- c. Communication interface between interceptor aircrews and the ground controlling agency is essential to ensure successful intercept completion. Flight safety is paramount. An aircraft which is intercepted by another aircraft shall immediately:
- (1) Follow the instructions given by the intercepting aircraft, interpreting and responding to the visual signals.
 - (2) Notify, if possible, the appropriate air traffic facility.

- (3) Attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit by making a general call on the emergency frequency 243.0 MHz and repeating this call on the emergency frequency 121.5 MHz, if practicable, giving the identity and position of the aircraft and the nature of the flight.
- (4) If equipped with secondary surveillance radar (SSR) transponder, select Mode 3/A Code 7700, unless otherwise instructed by the appropriate air traffic services unit. If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual or radio signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the instructions given by the intercepting aircraft.
- 8. NORAD PROCEDURES FOR SECURITY CONTROL OF AIR TRAFFIC DURING WARTIME EMERGENCIES AND DURING OTHER TIMES OF INTERNATIONAL TENSION.
- a. SCATANA procedures may be implemented after an air defense emergency is declared. They may be effective nationally or in large areas of the United States (the several states, the District of Columbia, the Commonwealth of Puerto Rico, and the several territories and possessions of the United States). When implemented, appropriate aeronautical facilities will direct all VFR traffic to land and file an IFR/DVFR flight plan and will implement other instructions specified by the appropriate military authorities. These may include grounding, diversion, and other restrictions to flight, plus the control (shutdown) of navigation aids.
- b. ESCAT procedures may be implemented when no air defense emergency or defense emergency has been declared or prior to the declaration of either of these conditions. ESCAT procedures usually apply to specific areas or regions of the United States where, in the interest of national security, identification and control of all aircraft operating within a specified area or region is required. These procedures, when implemented, will require all aircraft operating in the affected areas(s) to file IFR/DVFR flight plans and comply with specific instructions issued by appropriate aeronautical facilities. These instructions, which may require diverting or rerouting and other restrictions, will be issued by appropriate aeronautical facilities.

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