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FEDERAL AVIATION ADMINISTRATION  
NORTHERN CALIFORNIA TERMINAL RADAR APPROACH CONTROL (NCT)  
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**ISSUED:** November 25, 2008

**EFFECTIVE:** January 15, 2009

**NORTHERN CALIFORNIA TRACON LETTER TO AIRMEN NO. 08-01**

**SUBJECT:** SFO Revised Communications Procedure during Simultaneous Offset Instrument Approach (SOIA) Operations (ILS PRM 28L and LDA PRM 28R).

**CANCELLATION:** March 31, 2009

On Thursday, January 15<sup>th</sup>, 2009, the FAA will make substantial changes in the communications procedures used during PRM approaches when Simultaneous Offset Instrument Approach (SOIA) operations are in progress at San Francisco International Airport (KSFO). These changes will bring the communications procedures, used in SOIA, into closer conformance with other communications protocols presently utilized.

**PRESENTLY:**

The aircraft conducting the ILS PRM 28L and LDA PRM 28R approaches are switched to separate tower frequencies prior to the point where 1000 ft. of vertical separation is lost, usually at the beginning of the No Transgression Zone (NTZ), as far as 16 NM from the runway. At the time the aircraft are switched to a tower frequency (one for each runway), pilots are also required to monitor the PRM frequency (one for each runway). Normally, pilots will only hear tower communications on both frequencies. If the PRM controller transmits, both frequencies (tower and PRM) are overridden. Pilots only transmit on the tower frequency.

**CHANGES:**

1. In the new procedure, the aircraft will be retained on the final radar controller's frequency (one for each runway), until much closer to the runway (see #2 below) than occurs today. Therefore, the PRM controller's transmissions will override the final radar controller frequency (not the tower frequency, as is done today). To achieve the required communications redundancy prior to the loss of vertical or other separation, pilots must be monitoring the PRM frequency assigned to their runway no later than LOC intercept, and may begin to monitor the PRM frequency as soon as they are communicating with the final radar controller, 135.65 for 28L or 120.35 for 28R. Normally, pilots will only hear final radar controller's transmissions on both frequencies. If the PRM controller transmits, both frequencies (final radar controller and PRM) are overridden. Pilots only transmit on the final radar controller frequency, as they are accustomed to doing.

2. In the new procedure, the final radar controllers will continue to communicate with the aircraft until it reaches the near end of the NTZ, at NEPIC INT for the ILS PRM 28L approach, or at DARNE INT for the LDA PRM 28R approach. Pilots can expect to be switched to the tower frequency (120.5 for both runways) at NEPIC or DARNE. At this point, the aircraft will be as close as 3.4 NM from the runway threshold. Therefore, it is important that pilots switch to the tower frequency, as soon as practical, after being instructed to do so. Pilots should understand that while other transmissions may be occurring, and therefore, an immediate call to the tower may not be possible, the tower will be aware of the aircraft's position. Pilots may discontinue monitoring the PRM frequency after determining that the aircraft is on the tower frequency.

Attached to this NOTAM are the revised Attention All User Pages that will become effective on January 15, 2009, which reflect the changes described above. Only the bullet points have been changed on the revised AAUP. All other text remains as previously published. Also, attached are the SFO *currently* published ILS PRM 28L and LDA PRM 28R approach plates in NACO format, and a graphic depicting the new SFO SOIA PRM communications procedures.

**REVIEW:**

Beginning January 15, 2009, pilots conducting the SFO ILS PRM 28L or SFO LDA PRM 28R approach should:

1. Tune and monitor the PRM frequency when communicating with the final radar controller, no later than localizer intercept.
2. Expect to be switched to the tower frequency, 120.5 for both approaches at, but not later than, NEPIC or DARNE.



Donald H. Kirby

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Northern California Terminal Radar Approach Control

## ILS PRM RWY 28L

(SIMULTANEOUS CLOSE PARALLEL)

## SAN FRANCISCO INTL (SFO)

SAN FRANCISCO, CALIFORNIA

ATTENTION ALL USERS PAGE (AAUP)

### Condensed Briefing Points:

- Listen to the PRM monitor frequency when communicating with NORCAL approach control (135.65), no later than LOC intercept.
- Expect to be switched to SFO Tower (120.5) at NEPIC (I-SFO 5.3 DME).
- PRM monitor frequency may be de-selected after determining that the aircraft is on the tower frequency.

1. ATIS. When the ATIS broadcast advises that simultaneous ILS/PRM and LDA/PRM approaches are in progress, pilots should brief to fly the ILS/PRM 28L approach. If later advised to expect an ILS 28L approach, the ILS/PRM 28L chart may be used after completing the following briefing items:

- a. Minimums and missed approach procedures are unchanged.
- b. Monitor frequency no longer required.
- c. A different glideslope intercept altitude may be assigned when advised to expect the ILS 28L approach.

Simultaneous parallel approaches will only be offered/conducted when the weather is at least 2100 feet (ceiling) and 4 miles (visibility).

2. Dual VHF Communication required. To avoid blocked transmissions, each runway will have two frequencies, a primary and a PRM monitor frequency. The NORCAL approach controller will transmit on both frequencies. The PRM Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the approach controller's frequency (135.65), but will listen to both frequencies. Select the PRM monitor frequency audio only when in contact with NORCAL approach control (135.65). The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked. The PRM monitor frequency may be de-selected passing NEPIC.

3. All "Breakouts" are to be hand flown to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

a. ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The MVA in the final approach segment is 1,600 feet at San Francisco International Airport.

b. Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. Descending on (not above) the ILS glideslope ensures complying with any charted crossing restrictions and assists traffic on the LDA PRM 28R approach to mitigate possible wake turbulence encounters without destabilizing the LDA approach and creating a go-around.

5. LDA Traffic: While conducting this ILS/PRM approach to Runway 28L, other aircraft may be conducting the offset LDA/PRM approach to Runway 28R. These aircraft will approach from the right-rear and will re-align with 28R after making visual contact with the ILS traffic.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to SFO as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit. Non-participating pilots shall notify the Oakland ARTCC as soon as practical, but at least 100 miles from SFO.

ATTENTION ALL USERS PAGE (AAUP)

Condensed Briefing Points:

- Listen to the PRM monitor frequency when communicating with the NORCAL approach control (**frequency 120.35**), no later than LOC intercept
- Report the ILS traffic in sight as soon as practical and prior to DARNE, DO NOT PASS.
- Expect to be switched to SFO tower (120.5) at DARNE (1-FNP 4.0 DME).
- Remain on the LDA until passing DARNE (LDA MAP) so as not to penetrate the NTZ.
- PRM monitor frequency may be de-selected after determining that the aircraft is on the tower frequency.

1. ATIS. When the ATIS broadcast advises that simultaneous ILS/PRM and LDA/PRM approaches are in progress, pilots should brief to fly the LDA/PRM 28R approach. If later advised to expect an LDA/DME 28R approach, the LDA/PRM 28R chart may be used after completing the following briefing items:

- a. Minimums and missed approach procedures are unchanged.
- b. Monitor frequency no longer required.
- c. A different glideslope intercept altitude may be assigned when advised to expect LDA/DME 28R approach.

Simultaneous parallel approaches will only be offered/conducted when the weather is at least 2100 feet (ceiling) and 4 miles (visibility).

2. Dual VHF Communication required. To avoid blocked transmissions, each runway will have two frequencies, a primary and a PRM monitor frequency. The NORCAL approach controller will transmit on both frequencies. The PRM Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the approach controller's frequency (**120.35**), but will listen to both frequencies. Select the PRM monitor frequency audio only when in contact with the NORCAL approach control (**120.35**). The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked. If executing a missed approach at DARNE, begin the turn as soon as practical.

3. All "Breakouts" are to be hand flown to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

a. ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The applicable MVA is 1,600 feet at SFO.

b. Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. Glide Slope Navigation: Descending on the glide slope ensures compliance with any charted crossing restrictions.

5. SFO LDA Visual Segment. If ATC advises that there is traffic on the 28L ILS, pilots are authorized to continue past the LDA 28R MAP to align with runway 28R centerline when:

- a) the ILS traffic is in sight and is expected to remain in sight,
- b) ATC has been advised that "traffic is in sight" (ATC is not required to acknowledge this transmission)
- c) the runway environment is in sight.

Otherwise, a missed approach must be executed at the LDA MAP. Between DARNE and the runway threshold, pilots of the LDA aircraft are responsible for separating themselves visually from traffic on the ILS approach, which means maneuvering the aircraft as necessary to avoid the ILS traffic until landing (do not pass), and providing wake turbulence avoidance, if applicable. If visual contact with the ILS traffic is subsequently lost, advise ATC as soon as practical and execute the published missed approach unless otherwise instructed by ATC.

Refer to "special pilot training required" on the ILS PRM 28L AAUP for specific non-participation procedures.