

Consequences

- 1. Noise of departures louder for Burien residents.
- 2. Airport capacity constricted.
- 3. FAA may develop work-around taxi routes.
- 4. Port 150 sound analysis invalid?
- 5. Relocate 34R glide path with displaced threshold.
- 6. Displaced threshold, 34R, to create parallel thresholds.

When Parallel Operations?

Seattle Order "SEA 7110.1D, Seattle ATCT Standard Operating Procedures (SOP), Appendix A-3-8.

OPENING/CLOSING RUNWAY CHECKLISTS

CLOSING RUNWAY

1. BROADCAST OVER THE APPROPRIATE FREQUENCY WHEN THE RUNWAY IS CLOSED.
2. BROADCAST THE CLOSURE ON THE ATIS.
3. SHOW THE RUNWAY CLOSED ON THE ASDE-X.
4. ANNOTATE THE CLOSURE IN THE SIA ON THE ACE-IDS.
5. TURN OFF THE RUNWAY LIGHTS.
6. TURN OFF THE ILS IN ACCORDANCE WITH THE SEA/PORT OF SEATTLE OPENING AND CLOSING RUNWAY LOA.
7. MAKE AN ENTRY FOR THE CLOSURE ON THE DAILY LOG 7230-4.

OPENING RUNWAY

1. BROADCAST OVER THE APPROPRIATE FREQUENCY WHEN THE RUNWAY IS OPEN.
2. REMOVE THE CLOSURE FROM THE ATIS.
3. OPEN THE RUNWAY ON THE ASDE-X.
4. REMOVE THE CLOSURE FROM THE SIA ON THE ACE-IDS.
5. TURN ON THE RUNWAY LIGHTS WHEN NECESSARY.
6. TURN ON THE ILS IN ACCORDANCE WITH THE SEA/PORT OF SEATTLE OPENING AND CLOSING RUNWAY LOA.
7. MAKE AN ENTRY FOR THE OPENING ON THE DAILY LOG 7230-4.

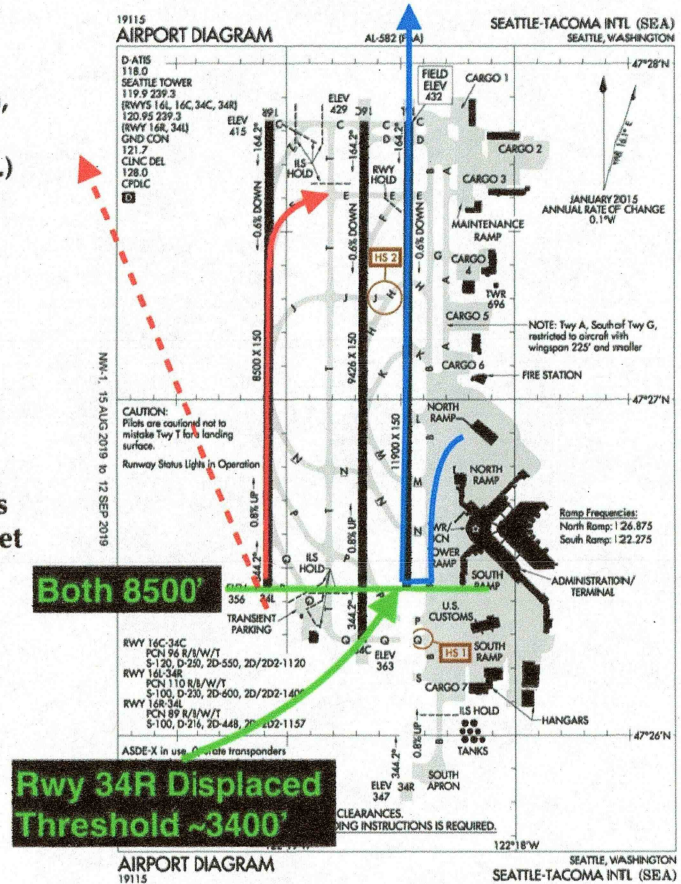
5-8-5 a. When parallel runway thresholds are even, the runway centerlines are at least 2,500 feet apart. (See FIG 5-8-9 and FIG 5-8-10.)

During simultaneous parallel operations (one on final and one departing) with even thresholds and 2500 feet between runway centerlines, arrivals on RWY 34L and departures on RWY 34R would be authorized by FAA Order JO 7110.65.

Center runway cannot be used during simultaneous parallel operations. Centerline is less than 2500 feet from RWYs 34L and 34R centerlines.

Instrument Landing System (ILS) would have to be relocated. Cat II & III approaches may be affected.

Ramp congestion extreme.

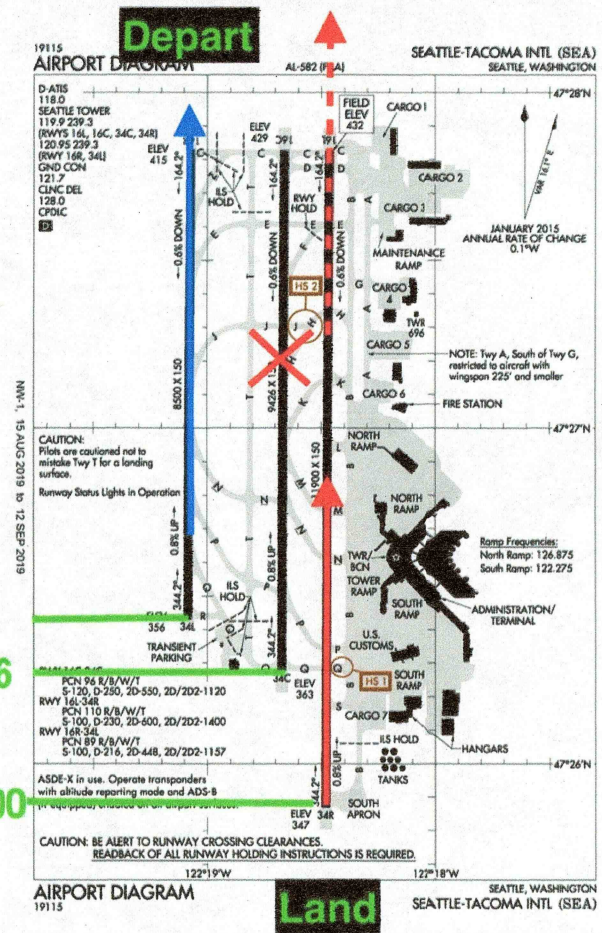


5-8-5 b. When parallel runway thresholds are staggered and:

1. The arriving aircraft is approaching the nearer runway: the centerlines are at least 1,000 feet apart and the landing thresholds are staggered at least 500 feet for each 100 feet less than 2,500 the centerlines are separated. (See FIG 5-8-11 and FIG 5-8-12.)

PROBLEMS:

1. Noise abatement course is ~340 degrees while the missed approach course RWY 34R is ~340 degrees. No 30 degrees divergence.
2. This authorization requires arriving aircraft (RED) to land on the "nearer" runway, RWY 34R. Currently RWY 34R is used for departures.

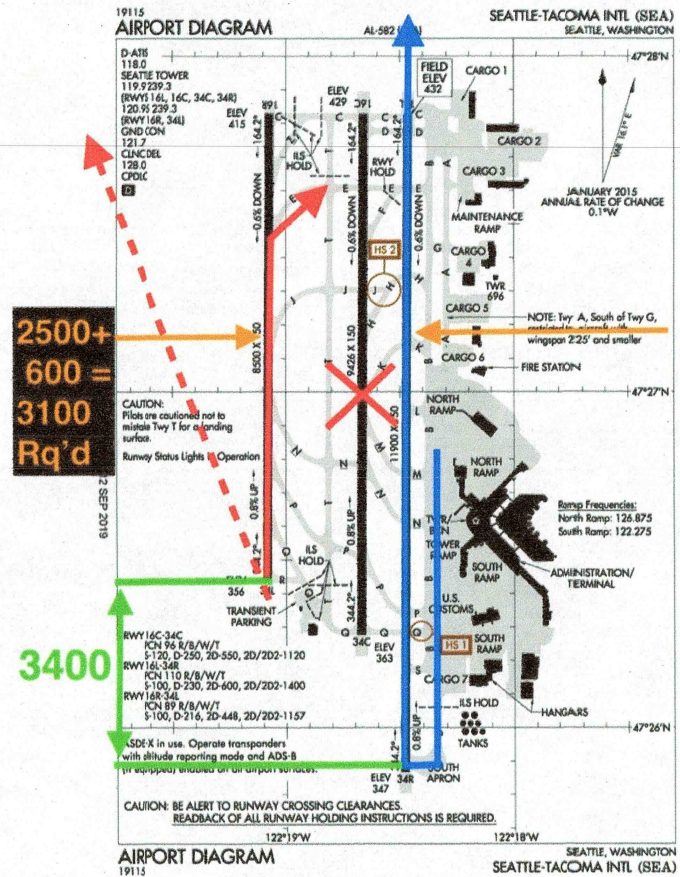


5-8-5 b. When parallel runway thresholds are staggered and:

2. The arriving aircraft is approaching the farther runway: the runway centerlines separation exceeds 2,500 feet by at least 100 feet for each 500 feet the landing thresholds are staggered. (See FIG 5-8-13.)

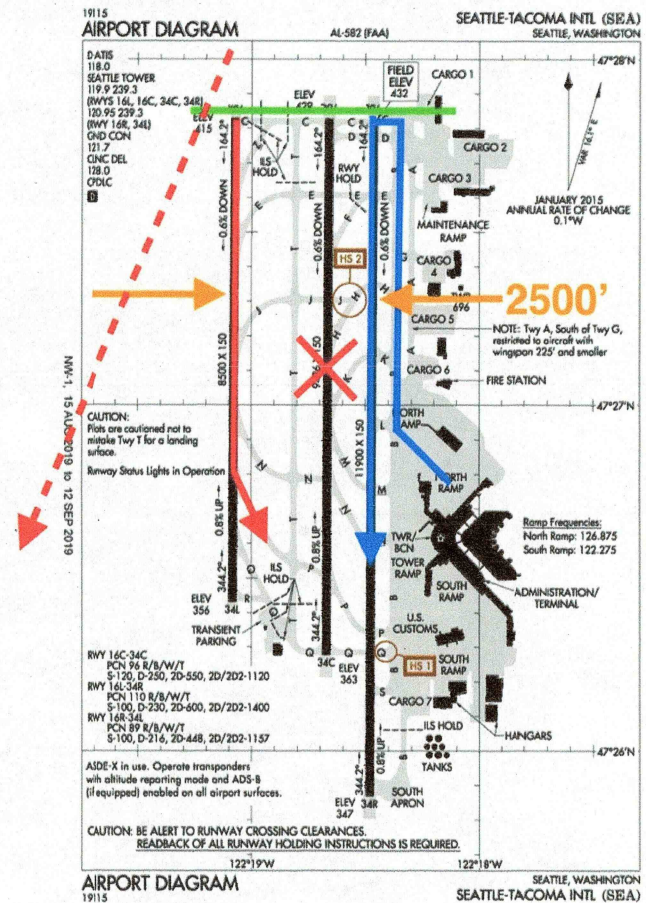
PROBLEM:

1. Runways must be separated by 2500 feet plus 500 feet for each 500 feet the landing thresholds are staggered. The stagger requires a separation of 3100 feet.



NW-1, 15 AUG 2019 to 12 SEP 2019

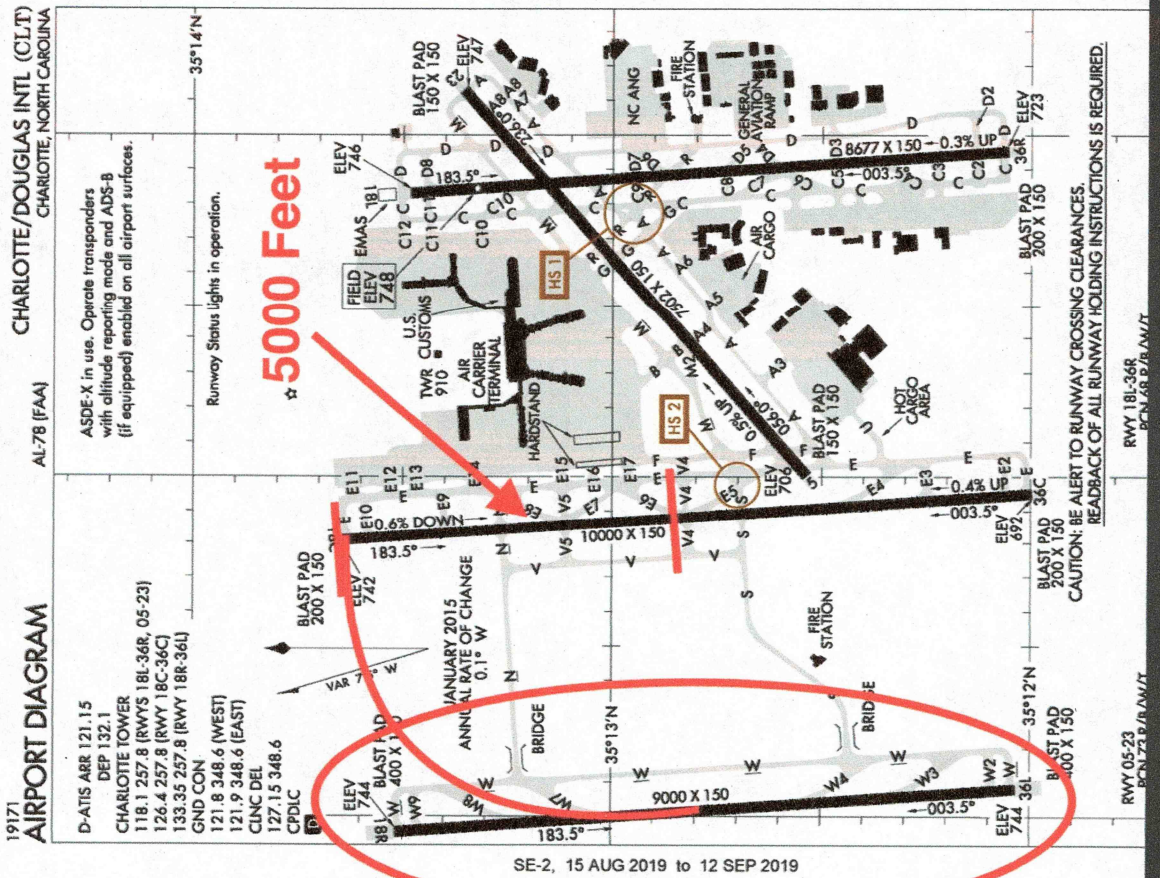
5-8-5 a. When parallel runway thresholds are even, the runway centerlines are at least 2,500 feet apart. (See FIG 5-8-9 and FIG 5-8-10.)



SEA Analysis

Let's analyze the runway
configuration at Seattle International
Airport

CLT



D-ATIS ARR 121.15
 DEP 132.1
 CHARLOTTE TOWER
 118.1 257.8 (RWY 18L-36R, 05-23)
 126.4 257.8 (RWY 18C-36C)
 133.35 257.8 (RWY 18R-36L)
 GND CON
 121.8 348.6 (WEST)
 121.9 348.6 (EAST)
 CLNC DEL
 127.15 348.6
 CPDLC

JANUARY 2015
 ANNUAL RATE OF CHANGE
 0.1° W

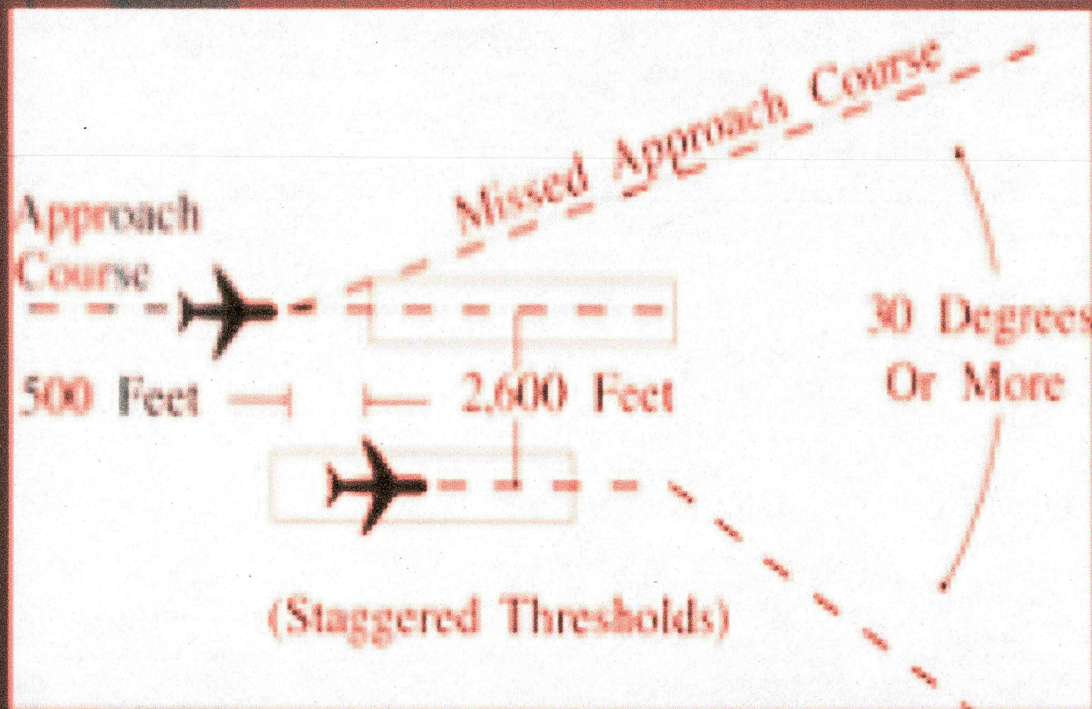
RWY 05-23
 PCN 18/36/AN/RT

RWY 18L-36R
 PCN 18/36/AN/RT

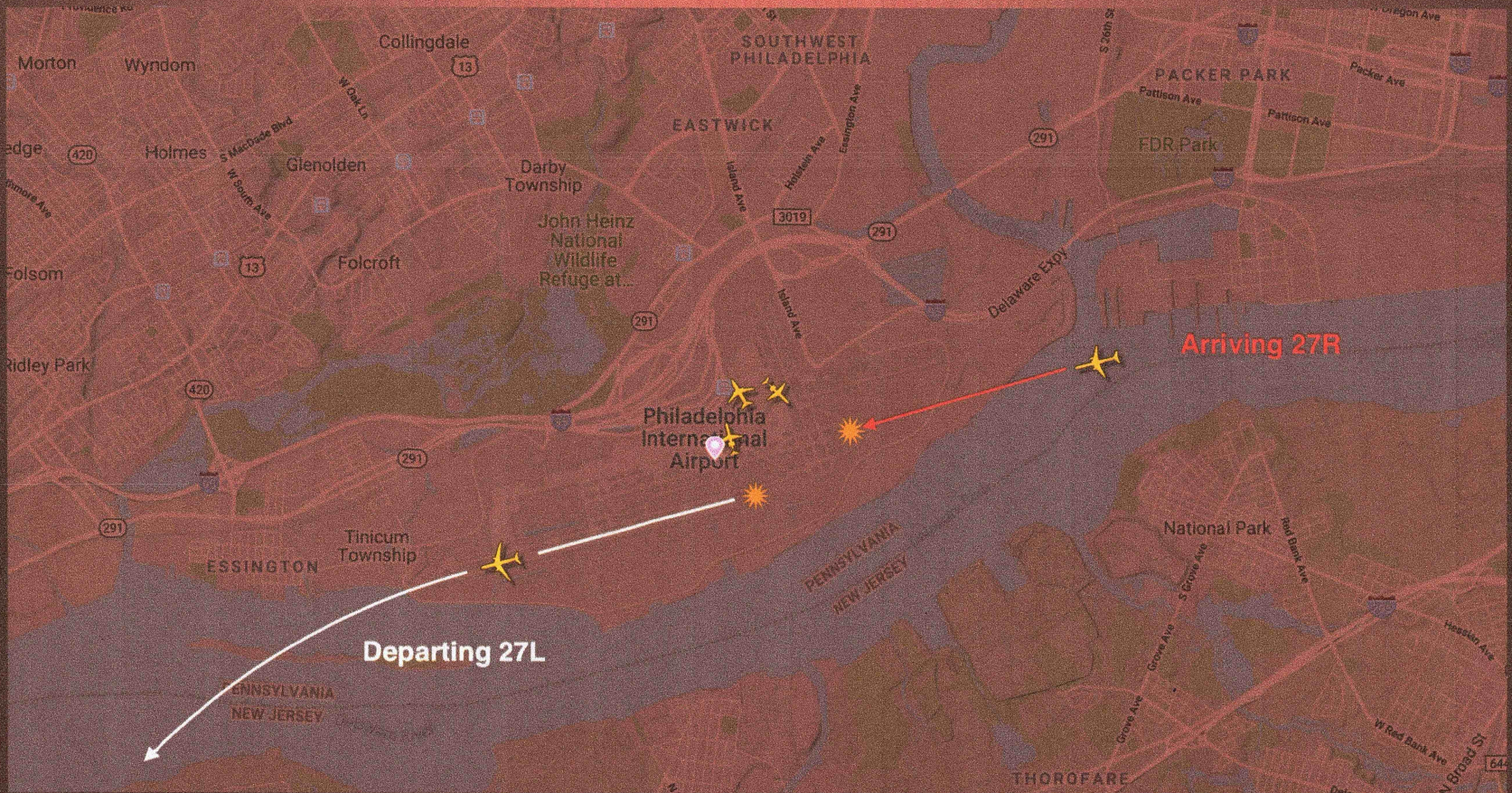
Paragraph 5-8-5, b, 2

”and **provided one of the following conditions are met:**”

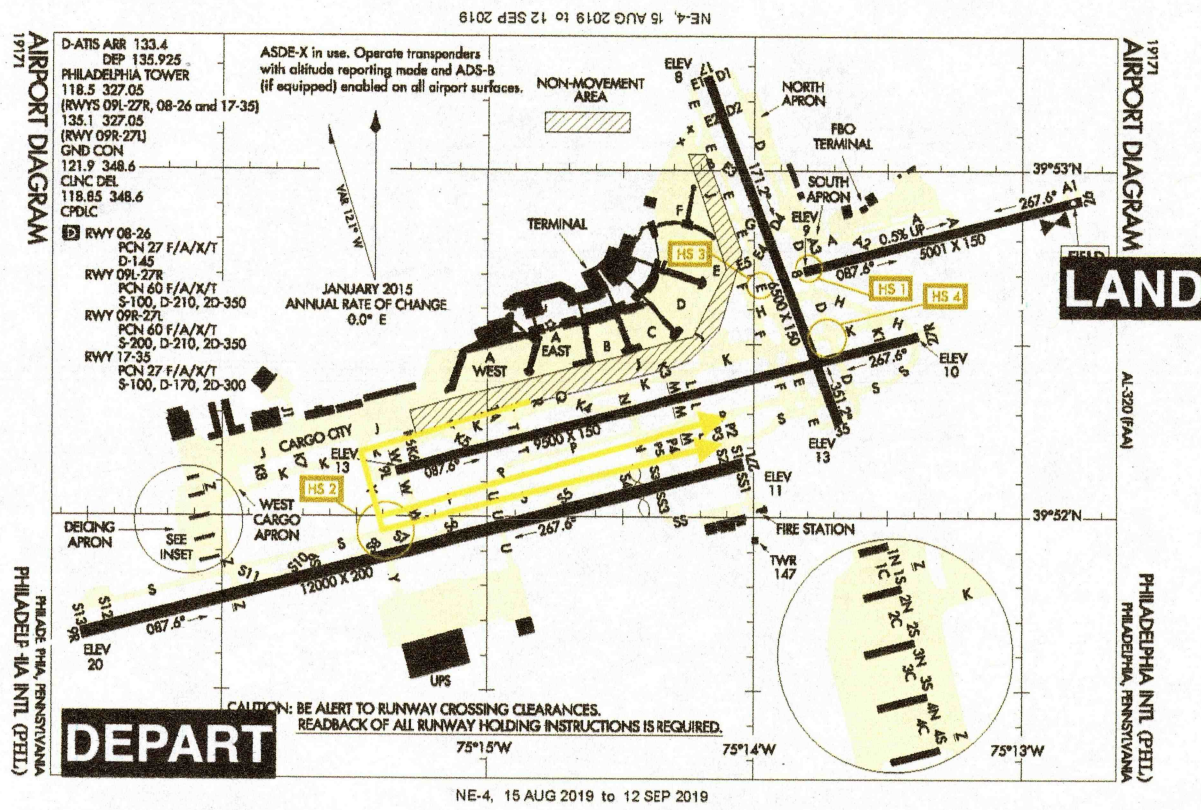
- b. When parallel runway thresholds are staggered and:
 - 2. The arriving aircraft is approaching the farther runway: the runway centerlines separation exceeds 2,500 feet by at least 100 feet for each 500 feet the landing thresholds are staggered. (See FIG 5-8-13.)



KPHL



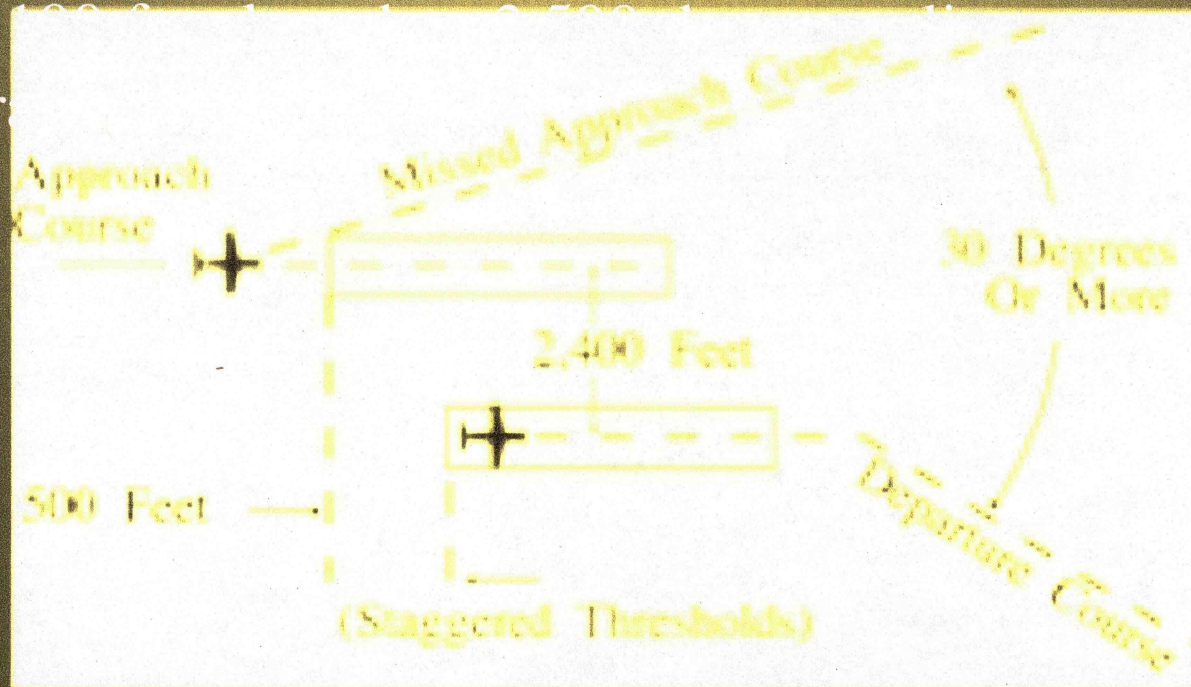
KPHL



Paragraph 5-8-5, b, 1

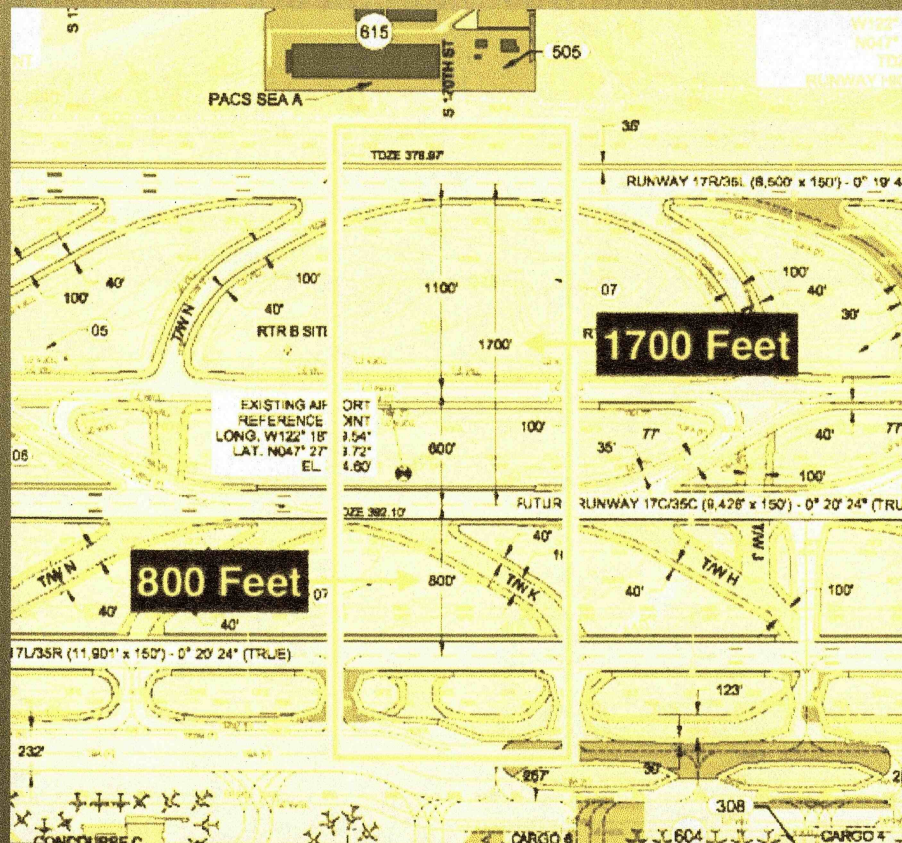
”and **provided one of the following conditions are met:**”

- b. When parallel runway thresholds are staggered and:
1. The arriving aircraft is approaching the nearer runway: the centerlines are at least 1,000 feet apart and the landing thresholds are staggered at least 500 feet for each separate runway.



QUESTION

What is the distances between the center runway. 34C, and the two adjacent runways?



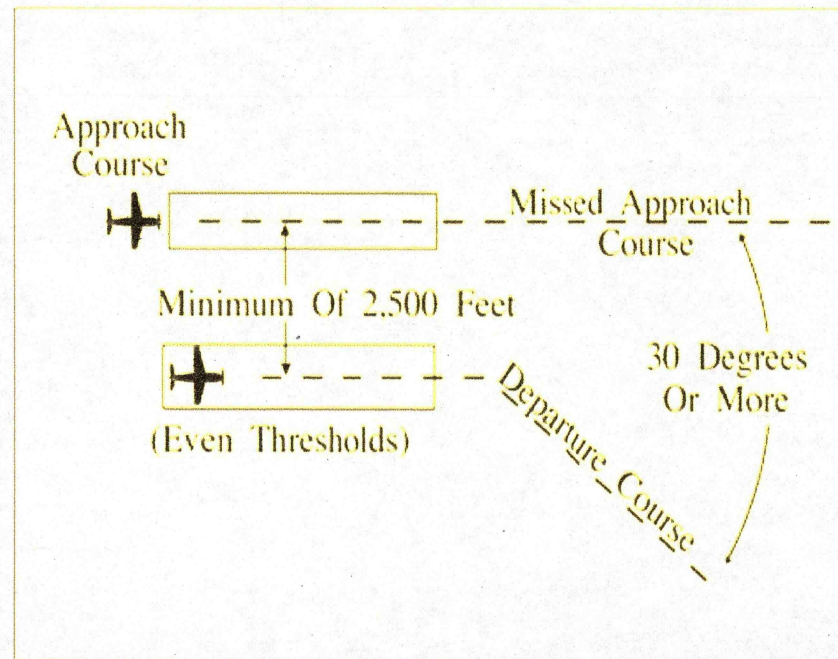
Paragraph 5-8-5, a

”and **provided one of the following**

conditions are met.”
a. When parallel runway thresholds are even, the runway centerlines are at least 2,500 feet apart. (See FIG 5-8-9 and FIG 5-8-10.)

FIG 5-8-9

Parallel Thresholds are Even



**5-8-5. DEPARTURES AND ARRIVALS ON PARALLEL
OR NONINTERSECTING DIVERGING RUNWAYS**

TERMINAL. Authorize simultaneous operations between an aircraft departing on a runway and an aircraft on final approach to another parallel or nonintersecting diverging runway if the departure course diverges immediately by at least 30 degrees from the missed

PARAGRAPH 5-8-5
DEPARTURES AND ARRIVALS ON PARALLEL OR
NONINTERSECTING DIVERGING RUNWAYS

FAA Order JO 7110.65Y
AIR TRAFFIC CONTROL
Effective Date: August 15, 2019

Section 8. Radar Departures

When Parallel Operations?

Seattle Order "SEA 7110.1D, Seattle ATCT Standard Operating Procedures (SOP), Appendix A-3-8.

OPENING/CLOSING RUNWAY CHECKLISTS

| CLOSING RUNWAY | OPENING RUNWAY |
|--|---|
| <ol style="list-style-type: none">1. BROADCAST OVER THE APPROPRIATE FREQUENCY WHEN THE RUNWAY IS CLOSED.2. BROADCAST THE CLOSURE ON THE ATIS.3. SHOW THE RUNWAY CLOSED ON THE ASDE-X.4. ANNOTATE THE CLOSURE IN THE SIA ON THE ACE-IDS.5. TURN OFF THE RUNWAY LIGHTS.6. TURN OFF THE ILS IN ACCORDANCE WITH THE SEA/PORT OF SEATTLE OPENING AND CLOSING RUNWAY LOA.7. MAKE AN ENTRY FOR THE CLOSURE ON THE DAILY LOG 7230-4. | <ol style="list-style-type: none">1. BROADCAST OVER THE APPROPRIATE FREQUENCY WHEN THE RUNWAY IS OPEN.2. REMOVE THE CLOSURE FROM THE ATIS.3. OPEN THE RUNWAY ON THE ASDE-X.4. REMOVE THE CLOSURE FROM THE SIA ON THE ACE-IDS.5. TURN ON THE RUNWAY LIGHTS WHEN NECESSARY.6. TURN ON THE ILS IN ACCORDANCE WITH THE SEA/PORT OF SEATTLE OPENING AND CLOSING RUNWAY LOA.7. MAKE AN ENTRY FOR THE OPENING ON THE DAILY LOG 7230-4. |