AC 121.445-1A

DATE 3/25/81 | 650left

ADVISORY CIRCULAR



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Washington, D.C.

FAR GUIDANCE MATERIAL

Subject: PILOT IN COMMAND QUALIFICATIONS FOR SPECIAL AREA/ROUTES AND AIRPORTS, FEDERAL AVIATION REGULATION (FAR) 121,445

- 1. <u>PURPOSE</u>. This advisory circular provides information for all Part 121 certificate holders concerning those areas/routes and airports where the Administrator has determined that special qualifications are required of pilots in command as provided in FAR 121.445.
- 2. <u>CANCELLATION</u>. Advisory Circular 121.445-1, Pilot in Command Qualifications for Special Area/Routes and Airports, Federal Aviation Regulation (FAR)121.445 dated August 15, 1980, is cancelled.
- 3. RELATED FAR SECTIONS. FAR 121.443 and 121.445.
- 4. BACKGROUND. The operating rules governing domestic and flag air carriers have for some time required pilots in command to be qualified over the routes and into airports where scheduled operations are conducted. The operations review program Notice No. 8 issued May 5, 1978, proposed, among other things, to eliminate the airport and route qualifications provisions for pilots in command operating under the domestic and flag rules. Further, it was proposed to amend FAR 121.445 to require pilots in command of all Part 121 certificate holders to meet special qualifications for certain airports and special type of navigation qualifications for certain areas or routes, or both, where the Administrator determined such qualifications are necessary. Amendment 121-159, which contains this regulatory change, became effective on August 31, 1980. This advisory circular provides industry with information necessary to meet the requirements of amended FAR 121.445 by identifying those areas/routes and airports where special pilot qualifications or special navigation qualifications are needed.
- 5. GENERAL REQUIREMENTS. FAR Part 121 now contains specific requirements for all certificate holders which govern pilot in command qualifications for certain routes and airports. FAR Section 121.443(a) requires:
- a. Each certificate holder to provide a system acceptable to the Administrator for disseminating certain information specified to the pilot

Initiated by: AFO-260

AC 121.445-1A 3/25/81

in command and appropriate flight operations personnel. The system must also provide an acceptable means for showing compliance with Section 121.445.

b. FAR 121.445 requires, in part, that the pilot in command, or second in command, meet the airport qualifications specified by making a qualifying entry to that airport (including a takeoff and landing) while serving as a pilot flight crewmember. The pilot in command may also meet the airport qualification by using pictorial means that are acceptable to the Administrator for that airport. These qualifications are to be within the preceding 12 calendar months for those airports determined to be unique due to items such as surrounding terrain, obstructions, or complex approach or departure procedures. The pilot in command qualification requirements for special airports are applicable to all airports listed in Appendix 1. This regulation also requires a special type of pilot navigation qualification for certain areas/routes between terminals.

6. SPECIAL AREA/ROUTES AND AIRPORTS.

- a. Special Airports. Appendix 1 of this circular contains a listing of airports, by regions, where it has been determined that pilots require special airport qualifications. FAR 121.443 requires, in part, for each certificate holder to provide a system acceptable to the Administrator for disseminating the information required therein to ensure that the pilots have adequate knowledge concerning the areas, and each airport and terminal area into which the pilot is to serve. Therefore, airports with congested areas and physical layouts such as John F. Kennedy in New York and O'Hare Field in Chicago, which do not have terrain problems, are not included in this circular.
- b. <u>Special Areas/Routes</u>. Pilots who have qualified with a particular type of pilot-operated navigation system in one area/route may be considered qualified in any other area/route using the same navigation system. Special type of navigation qualifications for pilots in command should be required for operations conducted with pilot-operated navigation systems in accordance with FAR 121.445(d):
- (1) When these systems are required by FAR 121.389 for the area/route to be flown,
- (2) When operations are conducted, with systems other than INS, within the areas of magnetic unreliability, published in the Canadian Aeronautical Information Publication (AIP), or
- (3) When operations are conducted over routes where the operations specifications require the use of special navigation procedures developed specifically for these routes, and the use of navigation equipment (i.e., LORAN, ADF) which is restricted to limited operational areas.

(4) These situations, however, are not all inclusive, and do not delete or supersede any special navigation qualifications or requirements which may currently exist in a particular air carrier's operations specifications. In addition, the special navigation qualifications necessary to meet the navigation performance required by FAR 91.20 for operation in the Minimum Navigation Performance Specifications (MNPS) Airspace are initial qualification requirements and, as such, are not subject to the recurring 12 calendar-month requirement of FAR 121.445, or to qualification/requalification by pictorial means.

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- (5) One of the acceptable methods in FAR 121.445(d) is by flying over a route or area as pilot in command under the supervision of a check airman using the special type of navigation system. This can also be accomplished under the supervision of an FAA inspector.
- c. Regional Input. Air carriers are encouraged to recommend additions or deletions to these listings. Recommendations, along with an explanation of the need for the addition or deletion, should be submitted to the assigned Principal Operations Inspector. The Principal Operations Inspector will forward the recommendation with his comments to the regional offices. The regions will provide updated information on these listings, as changes occur to the Air Transportation Division, AFO-200, who will make appropriate changes periodically.

KENNETH S. HUNT

Director of Flight Operations

APPENDIX 1. SPECIAL AIRPORTS

ALASKAN REGION

Airport Comments

Dutch Harbor, AK Mountainous terrain.

Juneau, AK Mountainous terrain.

Ketchikan, AK Mountainous terrain on both sides of

final approach.

Kodiak, AK Airport is surrounded by mountainous

terrain. Any go-around beyond ILS or GCA MAP will not provide obstruction

clearance.

Petersburg, AK Mountainous terrain in immediate vicinity

of airport, all quadrants.

Sandpoint, AK Mountainous terrain.

Seward, AK Mountainous terrain in immediate vicinity

of airport.

Sitka, AK Obstructions in missed approach, all

quadrants.

Valdez, AK Mountainous terrain in immediate vicinity

of airport.

Wrangell, AK Mountainous terrain in immediate vicinity

of airport, all quadrants.

U.S. MILITARY AIRPORTS

Airport Comments

Adak, AK Special conditions due to precipitous

terrain.

Cape Lisburne AFS, AK Mountainous terrain in approach zones;

nonstandard instrument approach.

Cape Newenham AFS, AK Runway located on mountain slope with

high gradient factor; nonstandard

instrument approach.

Cape Romanzof AFS, AK Runway located on side of mountain;

mountainous terrain both sides and north

end of runway.

U.S. MILITARY AIRPORTS (CONT'D)

Airport Comments

Indian Mountain AFS, AK Mountainous terrain.

Sparrevohn AFS, AK Mountainous terrain.

Tatalina AFS, AK Unique approach; mountainous terrain.

EASTERN REGION

Airport Comments

Beckley, W Mountainous terrain.

Bluefield, W Mountainous terrain.

Charleston (Kanawha), W Mountainous terrain.

Elmira (Chemung), NY Mountainous terrain.

Harrisburg Int'l, PA Mountainous terrain.

Hot Springs, VA Mountainous terrain.

Roanoke, VA Mountainous terrain, all quadrants.

Huntington, W Mountainous terrain.

Washington, DC (National) Special arrival/departure procedures.

Wilkes-Barre, PA Mountainous terrain.

Binghamton, NY Mountainous terrain.

EUROPEAN REGION

Airport Comments

Berlin, Germany Political sensitivity of corridor adherence.

Stuttgart, Germany Complex ATC procedures; limited

approach facilities.

Moscow, USSR Complex approach procedures.

Delhi, India Mountainous terrain.

3/25/81

AC 121.445-1A Appendix 1

GREAT LAKES REGION

Airport

Comments

Marquette, MI

Mountainous terrain.

NEW ENGLAND REGION

Airport

Comments

Dillant-Hopkins, NH

Mountainous terrain.

Lebanon Regional (Lebanon, NH)

Mountainous terrain.

Edward F. Knapp State

(Barre, VT)

Mountainous terrain.

Burlington Int'l, VI

Mountainous terrain.

NORTHWEST REGION

Airport

Comments

Klamath Falls, OR

Mountainous terrain.

PACIFIC REGION

Airport

Comments

Hong Kong Int'l,

(British Colony, S.E. China)

Special approach; mountainous terrain.

Lihue, Kauai, HI

High terrain; no precision approach;

6,000-foot runway.

Pago Pago

(Tutuila Island, U.S.)

Mountainous terrain.

Hilo (General Lyman), HI

Mountainous terrain.

Airports in the Peoples

Republic of China

Limited information.

All except the following:

Beijing/Capitol Shanghai/Hongqiao Hangzhou/Jianqiao Guangzhou/Baiyun AC 121.445-1A Appendix 1

ROCKY MOUNTAIN REGION

Airport Comments

Aspen, CO High terrain; special procedures.

Durango, CO High terrain; no radar; ILS.

Gunnison, CO VOR only; uncontrolled; numerous obstruc-

tions in airport area; complex departure

procedures.

Butte, MT Numerous obstructions; all nonprecision

approaches; no tower.

Yellowstone, MT Mountainous terrain.

Missoula, MT Mountainous terrain; special procedures.

Cody, WY Mountainous terrain; no approach control;

FSS off airport; no tower; nonprecision

approaches only.

Jackson Hole, WY Mountainous terrain, all quadrants;

complex departure procedures.

SOUTHERN REGION

Airport Comments

Rio de Janeiro, Brazil Mountainous terrain; complexity of

approaches; high traffic density.

San Jose, Costa Rica Mountainous terrain; unreliable

navaids.

Guatemala City, Guatemala High field elevation; mountainous

terrain; unique departure restrictions.

St. Thomas, VI Mountainous terrain.

Anniston, AL Traffic complexity.

Birmingham, AL Mountainous terrain.

Asheville, NC Mountainous terrain.

3/25/81

SOUTHERN REGION (Cont'd)

Comments Airport

St. Maarten, Netherland

Antilles

Mountainous terrain.

Pointe-a-Pitre, Guadeloupe

(in Leeward Islands)

Mountainous terrain.

Mountainous terrain. Tegucigalpa, Honduras

Quito, Ecuador

Special approach procedure.

La Paz, Bolivia

High altitude requires special

performance.

SOUTHWEST REGION

Airport Comments

Guadalajara, Mexico

High terrain; special departure

procedure.

WESTERN REGION

Comments Airport

Flagstaff, AZ High terrain.

Reno, NV High terrain.

San Diego, CA Rising terrain close to runway.

South Lake Tahoe, CA Unique approach.

Palm Springs, CA Mountainous terrain.

Mountainous terrain. Burbank, CA

U.S. Department of Transportation

Federal Aviation Administration

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Advisory Circular

Federal Aviation Administration

Subject: PILOT IN COMMAND QUALIFICATIONS FOR SPECIAL AREA/ROUTES AND AIRPORTS, FEDERAL AVIATION REGULATIONS Date: 3/9/88 Initiated by: AFS-220 AC No: 121.445-1B

Change:

(FAR) SECTION 121.445

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- 2. CANCELLATION. Advisory Circular 121.445-lA, Pilot in Command Qualifications for Special Area/Routes and Airports, Federal Aviation Regulation (FAR) 121.445, dated March 25, 1981, is cancelled.
- 3. RELATED FAR SECTIONS. FAR Sections 121.443 and 121.445.
- 4. BACKGROUND. The operating rules governing domestic and flag air carriers have for some time required pilots in command to be qualified over the routes and into airports where scheduled operations are conducted. operations review program Notice No. 8 issued May 5, 1978, proposed, among other things, to eliminate the airport and route qualifications provisions for pilots in command operating under the domestic and flag rules. Further, it was proposed to amend FAR Section 121.445 to require pilots in command of all Part 121 certificate holders to meet special qualifications for certain airports and special type of navigation qualifications for certain areas or routes, or both, where the Administrator determined such qualifications are necessary. Amendment 121-159, which contains this regulatory change, became effective on August 31, 1980. This advisory circular provides industry with information necessary to meet the requirements of amended FAR Section 121.445 by identifying those areas/routes and airports where special pilot qualifications or special navigation qualifications are needed.
- 5. GENERAL REQUIREMENTS. FAR Part 121 now contains specific requirements for all certificate holders which govern pilot in command qualifications for certain routes and airports. FAR Section 121.443(a) requires:
- a. Each certificate holder to provide a system acceptable to the Administrator for disseminating certain information specified to the pilot

3/9/88

in command and appropriate flight operations personnel. The system must also provide an acceptable means for showing compliance with FAR Section 121.445.

b. FAR Section 121.445 requires, in part, that the pilot in command, or second in command, meet the airport qualifications specified by making a qualifying entry to that airport (including a takeoff and landing) while serving as a pilot flight crewmember. The pilot in command may also meet the airport qualification by using pictorial means that are acceptable to the Administrator for that airport. These qualifications are to be within the preceding 12 calendar months for those airports determined to be unique due to items such as surrounding terrain, obstructions, or complex approach or departure procedures. The pilot in command qualification requirements for special airports are applicable to all airports listed in appendix 1. This regulation also requires a special type of pilot navigation qualification for certain areas/routes between terminals.

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- (5) One of the acceptable methods in FAR Section 121.445(d) is by flying over a route or area as pilot in command under the supervision of a check airman using the special type of navigation system. This can also be accomplished under the supervision of a Federal Aviation Administration inspector.
- c. Regional Input. Air carriers are encouraged to recommend additions or deletions to these listings. Recommendations, along with an explanation of the need for the addition or deletion, should be submitted to the assigned Principal Operations Inspector. The Principal Operations Inspector will forward the recommendation with his comments to the regional offices. The regions will provide updated information on these listings, as changes occur to the Air Transportation Division, AFS-200, who will make appropriate changes periodically.

William T. Brennan

Acting Director of Flight Standards

APPENDIX 1. SPECIAL AIRPORTS

ALASKAN REGION

<u>Airport</u> <u>Comments</u>

Dutch Harbor, AK Mountainous terrain.

Juneau, AK Mountainous terrain.

Ketchikan, AK Mountainous terrain on both sides of

final approach.

Kodiak, AK Airport is surrounded by mountainous

terrain. Any go-around beyond TLS or GCA MAP will not provide obstruction

clearance.

Petersburg, AK Mountainous terrain in immediate vicinity

of airport, all quadrants.

Sandpoint, AK Mountainous terrain.

Seward, AK Mountainous terrain in immediate vicinity

of airport.

Sitka, AK Obstructions in missed approach, all

quadrants.

Valdez, AK Mountainous terrain in immediate vicinity

of airport.

Wrangell, AK Mountainous terrain in immediate vicinity

of airport, all quadrants.

U.S. MILITARY AIRPORTS

Airport Comments

Adak, AK Special conditions due to precipitous

terrain.

Cape Lisburne AFS, AK Mountainous terrain in approach zones;

nonstandard instrument approach.

Cape Newenham AFS, AK Runway located on mountain slope with

high gradient factor; nonstandard

instrument approach.

Cape Romanzof AFS, AK Runway located on side of mountain;

mountainous terrain both sides and north

end of runway.

U.S. MILITARY AIRPORTS (CONT'D)

Airport Comments

Indian Mountain AFS, AK Mountainous terrain.

Sparrevohn AFS, AK Mountainous terrain.

Tatlina AFS, AK Unique approach; mountainous terrain.

EASTERN REGION

Airport Comments

Beckley, WV Mountainous terrain.

Bluefield, W Mountainous terrain.

Charleston (Kanawha), W Mountainous terrain.

Elmira (Chemung), NY Mountainous terrain.

Harrisburg Int'l, PA Mountainous terrain.

Hot Springs, VA Mountainous terrain.

Roanoke, VA Mountainous terrain, all quadrants.

Huntington, W Mountainous terrain.

Washington, DC (National) Special arrival/departure procedures.

Wilkes-Barre, PA Mountainous terrain.

Binghamton, NY Mountainous terrain.

EUROPEAN REGION

Airport Comments

Berlin, Germany Political sensitivity of corridor

adherence.

Stuttgart, Germany Complex ATC procedures; limited

approach facilities.

3/9/88

AC 121.445-1B Appendix 1

EUROPEAN REGION (CONT'D)

Airport Comments

Moscow, USSR Complex approach procedures.

Delhi, India Mountainous terrain.

GREAT LAKES REGION

Airport Comments

Marquette, MI Mountainous terrain.

NEW ENGLAND REGION

<u>Airport</u> <u>Comments</u>

Dillant-Hopkins, NH Mountainous terrain.

Lebanon Regional Mountainous terrain.

(Lebanon, NH)

Edward F. Knapp State

(Barre, VT)

Mountainous terrain.

Burlington Int'l, VT Mountainous terrain.

NORTHWEST MOUNTAIN REGION

<u>Airport</u> <u>Comments</u>

Klamath Falls, OR Mountainous terrain.

Aspen, CO High terrain; special procedures.

Durango, CO High terrain; no radar; ILS.

Gunnison, CO VOR only; uncontrolled; numerous obstruc-

tions in airport area; complex departure

procedures.

Butte, MT Numerous obstructions; all nonprecision

approaches; no tower.

Yellowstone, MT Mountainous terrain.

Missoula, MT Mountainous terrain; special procedures.

Cody, WY Mountainous terrain; no approach control;

FSS off airport; no tower; nonprecision

approaches only.

AC 121.445-1B Appendix 1

NORTHWEST MOUNTAIN REGION (CONT'D)

Airport Comments

Jackson Hole, WY Mountainous terrain, all quadrants;

complex departure procedures.

Eagle, CO Mountainous terrain.

Hayden, CO Mountainous terrain.

Telluride, CO High field elevation.

Hailey, ID (Friedman Memorial) Mountainous terrain; special arrival/

departure procedures.

Hayden, Yampa Valley, CO Mountainous terrain; no control tower;

special engine-out procedures for certain

large aircraft.

SOUTHERN REGION

Airport Comments

Rio de Janeiro, Brazil Mountainous terrain; complexity of

approaches; high traffic density.

San Jose, Costa Rica Mountainous terrain; unreliable navaids.

Guatemala City, Guatemala High field elevation; mountainous

terrain; unique departure restrictions.

St. Thomas, VI Mountainous terrain.

Anniston, AL Traffic complexity.

Birmingham, AL Mountainous terrain.

Asheville, NC Mountainous terrain.

St. Maarten, Netherland Mountainous terrain.

Antilles

Pointe-a-Pitre, Guadeloupe

(in Leeward Islands)

Mountainous terrain.

Tegucigalpa, Honduras Mountainous terrain.

Quito, Ecuador Special approach procedure.

La Paz, Bolivia High altitude requires special

performance.

SOUTHERN REGION (CONT'D)

Airport Comments

Key West Florida Int'l Airport Lake effect upon thermals on short final

to 4800-foot runway.

Las Americas, Santo Domingo No radar environment; prohibited area

and San Isidro Air Base Northeast of

field.

SOUTHWEST REGION

Airport Comments

Guadalajara, Mexico High terrain; special departure

procedure.

WESTERN-PACIFIC REGION

Airport Comments

Hong Kong Int'l, Special approach; mountainous terrain.

(British Colony, S.E. China)

Lihue, Kauai, HI High terrain; no precision approach;

6,000-foot runway.

Pago Pago Mountainous terrain.

(Tutuila Island, U.S.)

Hilo (General Lyman), HI Mountainous terrain.

Flagstaff, AZ High terrain.

Reno, NV High terrain.

San Diego, CA Rising terrain close to runway.

South Lake Tahoe, CA Unique approach.

Palm Springs, CA Mountainous terrain.

Burbank, CA Mountainous terrain.

Tribhuvan Int'l, Kathmundu, Mountainous terrain; high field

Nepal elevation; unique departure restriction.

AC 121.445-1B Appendix 1

WESTERN-PACIFIC REGION (CONT'D)

Airport

Comments

Airports in the Peoples Republic of China Limited information.

All except the following:

Beijing/Capitol Shanghai/Hongqiao Hangzhou/Jianqiao Guangzhou/Baiyun U.S. Department of Transportation

Federal Aviation Administration

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Advisory Circular

Subject: PILOT IN COMMAND QUALIFICATIONS FOR SPECIAL AREA/ROUTES AND AIRPORTS,

Date: 3/9/88 Initiated by: AFS-220 AC No: 121.445-1B

Change:

FEDERAL AVIATION REGULATIONS (FAR) SECTION 121.445

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APPENDIX 1. SPECIAL AIRPORTS

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U.S. MILITARY AIRPORTS

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AC 121.445-1B Appendix 1

U.S. MILITARY AIRPORTS (CONT'D)

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<u>Airport</u> <u>Comments</u>

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Huntington, W Mountainous terrain.

Washington, DC (National) Special arrival/departure procedures.

Wilkes-Barre, PA Mountainous terrain.

Binghamton, NY Mountainous terrain.

EUROPEAN REGION

Airoort Comments

Berlin, Germany Political sensitivity of corridor

adherence.

Stuttgart, Germany Complex ATC procedures; limited

approach facilities.

3/9/88

EUROPEAN REGION (CONT'D)

Airport

Comments

Complex approach procedures.

Delhi, India

Moscow, USSR

Mountainous terrain.

GREAT LAKES REGION

Airport

Comments

Marquette, MI

Mountainous terrain.

NEW ENGLAND REGION

Airport

Comments

Dillant-Hopkins, NH

Mountainous terrain.

Lebanon Regional

Mountainous terrain.

(Lebanon, NH)

Edward F. Knapp State

(Barre, VT)

Mountainous terrain.

Burlington Int'l, VT

Mountainous terrain.

NORTHWEST MOUNTAIN REGION

Airport

Comments

Klamath Falls, OR

Mountainous terrain.

Aspen, CO

High terrain; special procedures.

Durango, CO

High terrain; no radar; ILS.

Gunnison, CO

VOR only; uncontrolled; numerous obstructions in airport area; complex departure

procedures.

Butte, MT

Numerous obstructions; all nonprecision

approaches; no tower.

Yellowstone, MT

Mountainous terrain.

Missoula, MT

Mountainous terrain; special procedures.

Cody, WY

Mountainous terrain; no approach control; FSS off airport; no tower; nonprecision

approaches only.

AC 121.445-1B Appendix 1

NORTHWEST MOUNTAIN REGION (CONT'D)

Airport Comments

Jackson Hole, WY Mountainous terrain, all quadrants;

complex departure procedures.

Eagle, CO Mountainous terrain.

Hayden, CO Mountainous terrain.

Telluride, CO High field elevation.

Hailey, ID (Friedman Memorial) Mountainous terrain; special arrival/

departure procedures.

Hayden, Yampa Valley, CO Mountainous terrain; no control tower;

special engine-out procedures for certain

large aircraft.

SOUTHERN REGION

<u>Airport</u> <u>Comments</u>

Rio de Janeiro, Brazil Mountainous terrain; complexity of

approaches; high traffic density.

San Jose, Costa Rica Mountainous terrain; unreliable navaids.

Guatemala City, Guatemala High field elevation; mountainous

terrain; unique departure restrictions.

St. Thomas, VI Mountainous terrain.

Anniston, AL Traffic complexity.

Birmingham, AL Mountainous terrain.

Asheville, NC Mountainous terrain.

St. Maarten, Netherland Moun

Antilles

Mountainous terrain.

Pointe-a-Pitre, Guadeloupe

(in Leeward Islands)

Mountainous terrain.

Tegucigalpa, Honduras Mountainous terrain.

Quito, Ecuador Special approach procedure.

La Paz, Bolivia High altitude requires special

performance.

SOUTHERN REGION (CONT'D)

Airport Comments

Key West Florida Int'l Airport Lake effect upon thermals on short final

to 4800-foot runway.

Las Americas, Santo Domingo No radar environment; prohibited area

and San Isidro Air Base Northeast of

field.

SOUTHWEST REGION

<u>Airport</u> <u>Comments</u>

Guadalajara, Mexico High terrain; special departure

procedure.

WESTERN-PACIFIC REGION

<u>Airport</u> <u>Comments</u>

Hong Kong Int'l, Special approach; mountainous terrain.

(British Colony, S.E. China)

Lihue, Kauai, HI High terrain; no precision approach;

6,000-foot runway.

Pago Pago Mountainous terrain.

(Tutuila Island, U.S.)

Hilo (General Lyman), HI Mountainous terrain.

Flagstaff, AZ High terrain.

Reno, NV High terrain.

San Diego, CA Rising terrain close to runway.

South Lake Tahoe, CA Unique approach.

Palm Springs, CA Mountainous terrain.

Burbank, CA Mountainous terrain.

Tribhuvan Int'l, Kathmundu, Mountainous terrain; high field

Nepal elevation; unique departure restriction.

AC 121.445-1B Appendix 1

WESTERN-PACIFIC REGION (CONT'D)

Airport

Airports in the Peoples Republic of China

All except the following:

Beijing/Capitol Shanghai/Hongqiao Hangzhou/Jianqiao Guangzhou/Baiyun

Comments

Limited information.

U.S. Department of Transportation

Federal Aviation Administration

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