

KETCHIKAN INTERNATIONAL AIRPORT

VEHICLE OPERATORS

TRAINING MANUAL

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PREFACE

DEVIATION TO THE VEHICLE OPERATORS TRAINING MANUAL

1. **DEVIATION.** In an emergency situation requiring immediate action for the protection of life or property, deviation from this manual, to the extent required to meet the emergency, is authorized.
2. **REPORT.** In the event of a deviation, the deviator must submit a report, in writing, to the Director stating the nature, extent, and duration of the deviation.
3. **DEFINITION OF TERMS.**
 - a. **Airport.** Ketchikan International Airport and/or its operator, the Ketchikan Gateway Borough.
 - b. **Airport Operations Area (AOA).** Areas of the airport designed and used for landing, take-off, taxiing, and parking of aircraft – The runway, taxiways, and aircraft parking aprons. The AOA also includes the safety areas that surround runways and taxiways.
 - c. **Controller.** A FSS controller that monitors and reports vehicle traffic on the airport movement areas.
 - d. **Director.** The Director of Transportation Services or his authorized representative.
 - e. **Flight Service Station (FSS).** An FAA facility that provides flight service to aircraft. At Ketchikan International Airport, the Ketchikan FSS, call sign “Ketchikan Radio”, monitors and reports vehicle traffic on the airport movement areas.
 - f. **Movement Area.** The runway and upper taxiway and their surrounding safety areas where two-way radio communications with FSS is required.
 - g. **Non-movement Area.** The aircraft parking aprons and lower taxiway. No radio communication with FSS is required in this area.
 - h. **Personal Identification Badge (PIB).** A badge issued by the director that authorizes an individual access to the AOA and other secured areas of the airport.
 - i. **Restricted Area.** The entire portion of the airport inside the fence.

- j. Vehicle. All conveyances, except aircraft, used on the ground to transport persons, cargo or equipment.

SECTION A

VEHICLE AND OPERATOR REQUIREMENTS

1. VEHICLES – GENERAL.

- a. Only vehicles specifically authorized by the director and complying with the provisions of this manual shall operate on the AOA and within the restricted area of the airport. All authorized vehicles must have a company identification prominently displayed on the sides of the vehicle and an amber flashing strobe light attached to the top of the vehicle.
- b. All authorized vehicles will be registered with the airport. Vehicles will have a decal affixed on the left front bumper or, if no bumper exists, on the left front fender or quarter panel of the vehicle. Vehicle registrations must be renewed annually.
- c. The director will maintain a record of all permits.

2. VEHICLES – MOVEMENT AREAS.

- a. Ground vehicles, authorized by the Director to operate on movement areas and safety areas at the airport, are limited to those vehicles necessary for Airport Operations and include, but are not limited to, the following types of vehicles:
 - i. Airport-owned vehicles, including utility vehicles and firefighting and snow-removal equipment.
 - ii. Airways Facility Sector Field Office (AFSFO) vehicles.
 - iii. Construction vehicles operating under airport procedures for construction purposes.
 - iv. FBO tug vehicles when towing aircraft.
 - v. Emergency response vehicles.
- b. Under normal operations all vehicles operating on the movement area will be equipped with a rotating beacon or strobe light and radio for communication with FSS and aircraft or be escorted by such a vehicle.

3. OPERATORS.

- a. **GENERAL.** Any individual with a need to operate a ground vehicle in the Air Operations Area (AOA) must hold a valid state driver's license from any of the United States. The individual must also possess and display an airport PIB marked with a driver's endorsement.
- b. **MOVEMENT AREA.** In addition to the requirements for the AOA, an individual with a need to operate in the movement area must have a movement area endorsement on his or her PIB.
- c. **TRAINING.** Ground vehicles at the airport are required to operate under the procedures established in this manual. Employers are responsible for training their employees who must operate ground vehicles on the AOA. Employers and employees will be required to sign a Vehicle Operators Training Certification form, as shown in Section E, assuming full responsibility for their employees' training, actions, or failure to act. Consequently, the employer and/or employee may be responsible for any fines levied by the FAA, airport, or other organizations relating to the operation of ground vehicles on the AOA.
- d. **CONSEQUENCES OF NON-COMPLIANCE.**
 - i. The primary concern of the director is the safe and efficient operation of ground vehicles in the AOA. The intent of the consequences for non-compliance is not to punish the violator, but to encourage future compliance with safety regulations.
 - ii. The director will take appropriate enforcement action based on the severity of the offense. The director reserves the right to impose any or all of the following penalties: required recurrent training, verbal or written reprimand, written warning to employer, temporary or permanent suspension of driving privileges, revocation of airport AOA or SIDA badge.

SECTION B

VEHICLE OPERATING PROCEDURES

1. GENERAL.

- a. Any accident or incident on movement areas, involving aircraft and/or ground vehicles, will be reported to the director or airport police immediately after the accident or incident.

- b. All vehicles operating in the aircraft non-movement areas are restricted to 15 MPH except when towing equipment; then the speed is restricted to 5 MPH or as safe operations will permit.
- c. The vehicle rotating beacon or strobe light will be operated at all times while on the AOA.
- d. Aircraft have the right-of-way at all times. Vehicles are required to yield to all moving aircraft.
- e. Except for emergencies, the maximum speed limits are 15 mph on the aircraft parking ramps/apron, 25 mph on the taxiways, and 50 mph on the runway. Speeds should be reduced as conditions warrant.
- f. Vehicle drivers should approach an aircraft with the driver's side closest to the aircraft. Normally, a vehicle should not be driven within 10 feet of an aircraft, nor should any vehicle be driven under the wings of an aircraft.
- g. Vehicle operators should always make an effort to approach and park near an aircraft so that they do not have to back up to depart the area.
- h. Vehicle Access Control.
 - i. There are two electronic gates at which vehicle entrance into the air operations area (AOA) can be gained. These gates are labeled as F2 and F4. (See map in Section E.) Access through gate F2 is limited solely to airport employees. All manual gates are restricted based on need.
 - ii. Vehicle drivers entering or exiting the AOA from electronic gates must wait for the gate to completely close before leaving the area to ensure no unauthorized access by other personnel. Immediately report malfunctioning gates which are not secured to the director or other airport employee.

While waiting for the gate to close, if another driver re-opens the electronic gate before it has closed completely, the initial driver can relinquish control of the gate to the driver who re-opened it. The new driver must then wait until the gate is completely closed before leaving the area to ensure no authorized access by other personnel.
 - iii. Vehicle drivers entering or exiting the AOA from manual gates must physically secure the gate before leaving the area to ensure no unauthorized access by other personnel. Immediately report

malfunctioning locks which cannot be secured to the director or other airport employee.

2. OPERATING ON AIRPORT MOVEMENT AREAS.

- a. Under no circumstances is any vehicle and/or driver permitted in a movement area unless it is an airport-approved vehicle and properly equipped, and the employee is trained and certified in proper operating procedures with the appropriate endorsements on the PIB. All other vehicles and/or operators must be escorted by an approved vehicle that has communication with the FSS. Under no circumstances is an unattended vehicle or employee to be left in a movement area.
- b. Although the airport is officially an uncontrolled airport (No air traffic control tower), all vehicles operating on movement areas and safety areas are required to be equipped with a two-way radio allowing communications with FSS. Vehicles operating in the non-movement area are not required to have the radio communication capability.
- c. Prior to entering a movement area the driver must first contact FSS, advise them of their intentions, and confirm no reported traffic. You must coordinate with FSS for access to each taxiway and/or runway separately.
- d. A vehicle operator shall not cross the HOLD SHORT LINES until FSS confirms there is no reported traffic. When advised by FSS to "HOLD SHORT of a runway," the vehicle operator should stop so as no part of the vehicle extends beyond the HOLD SHORT LINE. A vehicle exiting the runway is not clear until all parts of the aircraft/vehicle have crossed the HOLD SHORT LINE.
- e. Access onto the movement area without appropriate coordination can be investigated by the director or FAA as a possible violation of Federal Aviation Regulation (FAR) Part 139. Any vehicle operator involved in a runway incursion incident will be required to submit a written report to the director.
- f. Movement areas or areas adjacent to movement areas under construction will be closed to aircraft operations if possible. Construction equipment which must operate on active movement areas will be controlled by flagmen or a radio equipped escort vehicle. Operators on construction equipment will be briefed on their procedures for operating on or near movement areas.
- g. If radio communications with FSS are lost while operating on movement areas, the vehicle operator will immediately exit the movement area by the

most direct route possible, being careful to avoid potential conflict with aircraft, and advise FSS of their status as soon as practical.

3. INSTRUMENT LANDING SYSTEM (ILS) CRITICAL AREAS.

- a. This airport has two ILS critical areas. These locations are depicted on the airport diagram at Exhibit 2 of this manual.
- b. This airport does not have ILS critical area holding positions on any of the movement areas. There are signs posted along the critical areas' boundaries at potential vehicle access locations off the movement area. These signs read, "ILS CRITICAL AREA."
- c. ILS critical areas protect signals to approaching aircraft. Vehicles within ILS critical areas could cause false signals. Any vehicle operator needing vehicle access into a critical area should coordinate with FSS prior to entering the area and report to FSS after they have left the area.

SECTION C

RADIO COMMUNICATION PHRASEOLOGY & TECHNIQUES

1. GENERAL

- A. Radio communications are a critical link in the airport operations. The link can be a strong bond between pilot/driver and FSS or it can be broken with surprising speed and disastrous results. Discussion herein provides basic procedures for vehicle drivers and also highlights safe operating concepts for all.
- B. The single, most important thought in communication is understanding. It is essential, therefore, that drivers acknowledge each radio communication with FSS by using the appropriate vehicle call sign. Brevity is important, and contact should be kept as brief as possible, but the FSS controller must know what you want to do before he can properly carry out his duties. And you, the driver, must know exactly what he or she wants you to do. Since concise phraseology may not always be adequate, use whatever words are necessary to get your message across.

2. RADIO TECHNIQUE.

- a. Listen before you transmit. Except for a few situations where some frequency overlap occurs, if you hear someone else talking, the keying of your transmitter will be futile and you will probably jam their receivers

causing them to repeat their call. Determine if there is any immediate aircraft traffic on the movement area.

- b. Think before keying your transmitter. Know what you want to say.
- c. The microphone should be very close to your lips and after pressing the mike button, a slight pause may be necessary to be sure the first word is transmitted. Speak in a normal conversational tone.
- d. When you release the button, wait a few seconds before calling again. The controller may be jotting down your number, looking for a flight plan, transmitting on a different frequency, or selecting his transmitter to your frequency.
- e. Be alert to the sounds or lack of sounds in your receiver. Check your volume, recheck your frequency and make sure that your microphone is not stuck in the transmit position. Frequency blockage can, and has occurred for extended periods of time due to unintentional transmitter operation. This type of interference is commonly referred to as a "stuck mike."

3. CONTACT PROCEDURES.

- a. Initial Contact
 - i. The term "initial contact" or "call-up" means the first radio call you make to FSS. Call the facility, identify yourself, and state your intentions.

EXAMPLE: Ketchikan Radio, Plow 7, access on the runway from Taxiway Alpha.
 - ii. Use discretion and do not overload the controller with information he/she does not need.
- b. Subsequent contact and responses to call-ups from FSS.
 - i. Use the same format as used for initial contact except you should state your message or request with the call-up in one transmission. The ground station name may be omitted if the message requires an obvious reply and there is no possibility for misunderstanding. You should acknowledge all call-ups or FSS directions unless the controller advises otherwise.

EXAMPLE RESPONSE:

FSS: "Plow 7, Ketchikan Radio, no reported traffic."

Vehicle Operator: "Plow 7 proceeding on runway."

EXAMPLE RESPONSE:

FSS: "Plow 7, Ketchikan Radio, traffic 3-mile final, hold short of the runway."

Vehicle Operator: "Plow 7 holding short of the runway."

- c. Vehicle operators should visually check for traffic before entering the runway and periodically while on the runway, and monitor the radio for reported traffic or advisories from FSS.
 - d. Once the vehicle is off the runway or taxiway, the vehicle operator should advise FSS.
4. **PHONETIC ALPHABET.** The International Civil Aviation Organization's (ICAO) phonetic alphabet is used by FSS personnel when communications conditions are such that the information cannot be readily received without their use. FSS facilities may also request drivers to use phonetic letter equivalents for identifying taxiways.

Additionally, use the phonetic equivalents for single letters and to spell out groups of letters or difficult words during adverse communications conditions.

CHARACTER TELEPHONY PHONIC (PRONUNCIATION)

A	Alfa (AL-FAH)
B	Bravo (BRAH-VOH)
C	Charlie (CHAR-LEE) OR (SHAR-LEE)
D	Delta (DELL-TAH)
E	Echo (ECK-OH)
F	Foxtrot (FOKS-TROT)
G	Golf (GOLF)
H	Hotel (HOH-TEL)
I	India (IN-DEE-AH)
J	Juliet (JEW-LEE-ETT)
K	Kilo (KEY-LOH)
L	Lima (LEE-MAH)
M	Mike (MIKE)
N	November (NO-VEM-BER)
O	Oscar (OSS-CAR)

P	Papa (PAH-PAH)
Q	Quebec (KEH-BECK)
R	Romeo (ROW-ME-OH)
S	Sierra (SEE-AIR-RAH)
T	Tango (TANG-GO)
U	Uniform (YOU-NEE-FORM)
V	Victor (VIK-TER)
W	Whiskey (WISS-KEY)
Y	Yankee (YANG-KEY)
Z	Zulu (ZOO-LOO)
1	One (WUN)
2	Two (TOO)
3	Three (TREE)
4	Four (FOW-ER)
5	Five (FIFE)
6	Six (SIX)
7	Seven (SEV-EN)
8	Eight (AIT)
9	Nine (NIN-ER)
0	Zero (ZEE-RO)

SECTION D

AIRPORT MARKINGS, LIGHTING & SIGNS

1. AIRPORT MARKINGS.

- a. Runways.
 - i. Runway designations. Runway numbers and letters are determined from the approach direction. The runway number is the whole number nearest one-tenth the magnetic azimuth of the centerline of the runway, measured clockwise from the magnetic north. The runways at our airport are numbered as 11 and 29.
 - ii. Runway pavement markings are always white. The centerline of a runway is a broken white line; the edge of the runway is a solid white line. Other markings on runways are touchdown markings, fixed distance markings and threshold markings.
- b. Taxiways. The taxiway centerline is marked with a continuous yellow line. The taxiway edge is marked with two continuous yellow lines 6 inches apart.

- c. Runway "HOLD SHORT LINES" consist of two continuous and two dashed yellow lines, perpendicular to the taxiway centerline. HOLD SHORT LINES also consist of one or more signs at the edge of the taxiway, with white runway numbers on a red sign face.

NOTE: See Section E, which shows an example of hold line markings and signage and an airport diagram with the locations of taxiways and HOLD SHORT LINES.

2. AIRPORT LIGHTING.

All taxiway edge lights are colored blue and they are at each edge of the taxiway. Runway edge lights are white, except the last 2000 feet of an instrument approach runway is colored amber. Across the end of each runway there are threshold lights, these lights have a split lens, red on the runway side and green on the approach side.

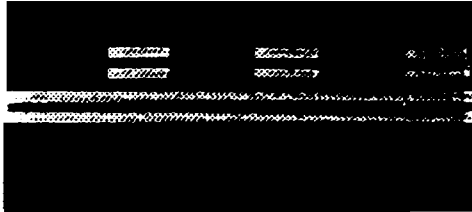
3. AIRPORT SIGNS.

- a. The colors, sizes and locations of signs are important.
- b. Signs that have yellow backgrounds with black lettering are Guidance Signs. These signs generally direct pilots and drivers towards a particular area on the airport. They can be used to direct towards runways, other taxiways, ramps, etc.
- c. Signs with black backgrounds and yellow lettering are Taxiway Designation Signs. These signs are located to inform pilots and drivers of the taxiway they are on.
- d. Red colored signs with white lettering indicate a Hold Short Sign. Pilots and drivers should not go beyond these signs unless they have confirmed with FSS that there is no reported traffic.
- e. Black signs with white numerals located along the runways are Distance Remaining Signs. This gives pilots the distance, measured in thousands of feet, remaining on the runway prior to reaching its end.

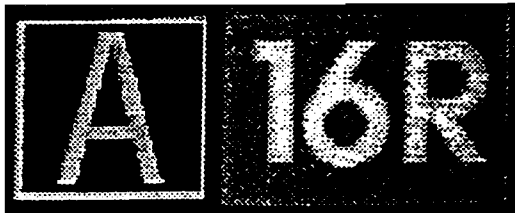
SECTION E

EXHIBITS

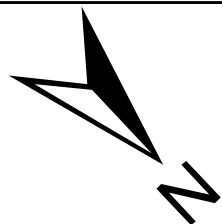
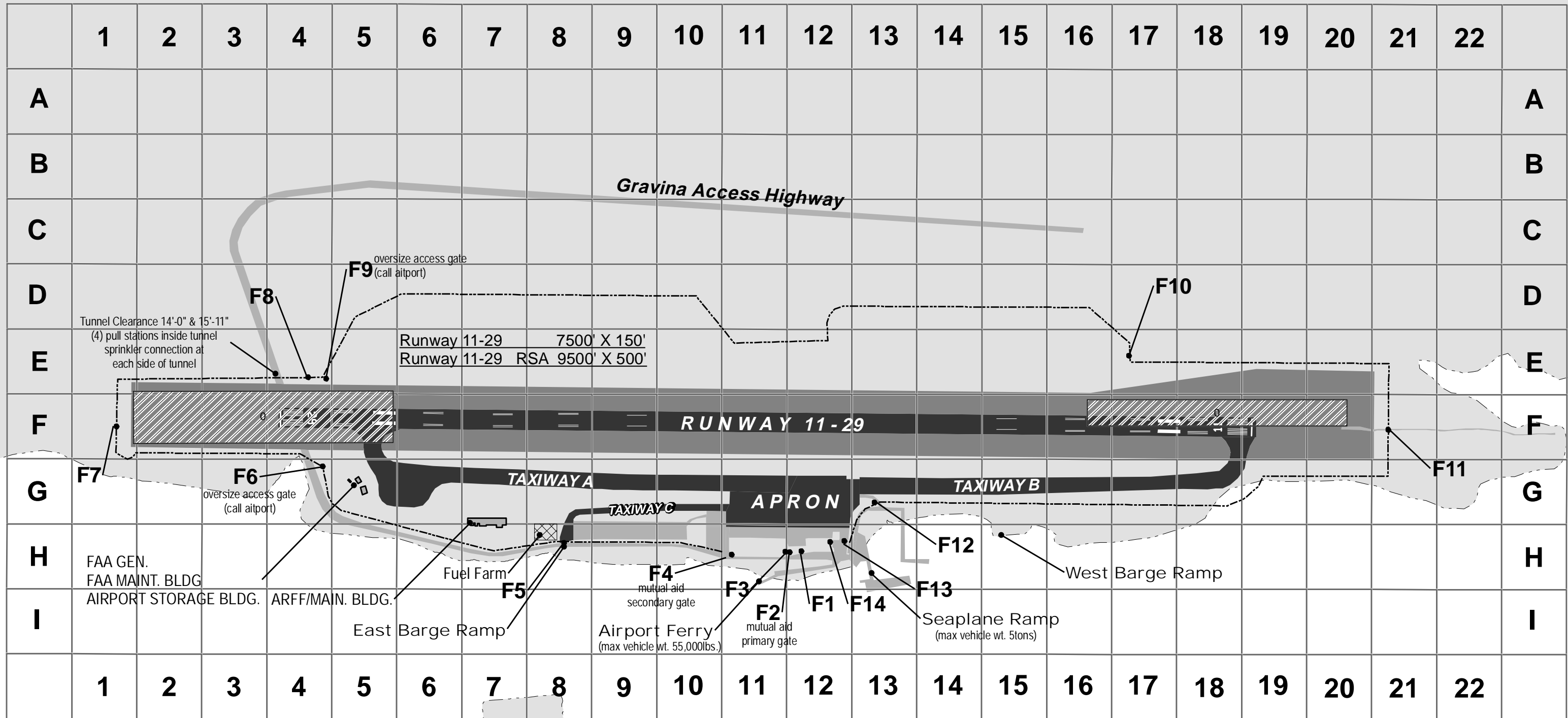
1. Runway Hold Line marking and signage examples
2. Airport Diagram
3. Aircraft Parking Ramp Diagram
4. Vehicle Operators Training Certification



Hold Line Marking



*Signage when on taxiway A
holding short of runway 16R*



1 inch = 750 feet



ILS Critical Areas 

Fence line 

Ketchikan International Airport

Emergency Response Grid

5/19/2009

EXHIBIT 3 - Vehicle Operators Training Certification

KETCHIKAN INTERNATIONAL AIRPORT
VEHICLE OPERATORS TRAINING CERTIFICATION

EMPLOYEE NAME (print) _____

COMPANY (print) _____

By affixing their signatures below, the employer and employee certify that they have conducted/received both classroom and practical training concerning the pertinent and applicable portions of the Ketchikan International Airport Vehicle Operators Training Manual, and that the employee has read and understood the contents of the manual.

EMPLOYER SIGNATURE

Date: _____

EMPLOYEE SIGNATURE

Date: _____