

Friedman Memorial Airport Authority



Regular Meeting

April 09, 2013

Approve Friedman Memorial Airport Authority Meeting Minutes

- March 12, 2013 Regular Meeting Minutes
- March 21, 2013 Special Meeting
- March 27, 2013 Special Meeting
 - Approval

Reports

- Chairman Report
- Blaine County Report
- City of Hailey Report
- Airport Manager Report
- Communication Director Report
 - Coffee Talk
 - Airport Tour

**AIRPORT STAFF BRIEF
QUESTIONS**

UNFINISHED BUSINESS

Airport Solutions Existing Site






- Plan to Meet 2015 Congressional Safety Area Requirement
 - Presented by Mr. Dave Mitchell, T-O Engineers & Airport Manager

Plan To Meet 2015 Congressional Safety Area Requirement – Formulation Services

- Finished up negotiation
- Initial work underway:
 - Survey
 - Preliminary analysis

Modifications of Standards

- FAA Headquarters reviewed the MOS documents

MOS STATUS		
1	Runway-Parallel Taxiway	
2	Parallel Taxiway OFA Width	
3	Runway OFA Width	
4	Runway Safety Area Grading	
5	Runway-Aircraft Parking	

MOS 1 – Runway - Parallel Taxiway Separation

- Goal: Maximize Runway – Parallel Taxiway Separation
- Problem: Hangars
- This MOS proposes separation of 320', the best we can do without removing buildings, etc.



MOS 1 – Runway - Parallel Taxiway Separation

- FAA HQ (Airports Division) says they will only approve with conditions:
 - No Airplane Design Group (ADG) III aircraft on the parallel taxiway when any other aircraft is landing or taking off
 - No aircraft on parallel taxiway when any ADG III aircraft is landing or taking off



MOS 1 – Runway - Parallel Taxiway Separation

- FAA Helena ADO and Northwest Mountain Region are still supportive of the MOS
- Discussions continue
 - Other FAA divisions may object to these restrictions
 - SMS process may be required to resolve

MOS 1 – Runway - Parallel Taxiway Separation White Paper

- Goal: Convince FAA to approve the MOS without the operational restrictions
- Runway-Taxiway Separation
 - Not based on wingspan, according to FAA HQ
 - Based on protecting imaginary surfaces adjacent to the runway environment



MOS 1 – Runway - Parallel Taxiway Separation White Paper

- Arguments For (in addition to the risk-based rationale in the original MOS):
 - The Runway Obstacle Free Zone and other imaginary surfaces are clear
 - FAA design software allows for reduction

MOS 1 – Runway - Parallel Taxiway Separation White Paper

- Arguments For, cont'd:

ADG	Wingspan	Tail Height
II	49' - <79'	20' - <30'
III	79' - <118'	30' - <45'

- Maximum tail height for the current fleet of aircraft = 27.5'
 - With the current fleet and 95,000 lbs weight restriction, this won't change
 - ADG II
 - FAA has a precedence of modifying Runway-Taxiway Separation if tail heights fall in a lower ADG

MOS 1 – Runway - Parallel Taxiway Separation White Paper

- Arguments against the operational restrictions:
 - Head to head operations (safety)
 - Enforcement and liability (Who will enforce when the tower is closed?)
 - This operational scenario may very well be less safe than the 320' separation



What's Next? (MOS)

- MOS 1:
 - Finish White Paper and discuss with ADO and others in FAA
 - Continue to push for resolution
- MOS 2-5:
 - Monitor progress
 - Provide information, as necessary
- FAA may want to do an SMS analysis of all MOS

What's Next? (Everything Else)

- Finish up preliminary survey (building corners, fences, etc.) and review data
- Complete detailed survey
- Evaluate geometry



What's Next? (Everything Else)

- Identify potential project(s) for this year
- Visit Helena on April 16-17
 - Introductions
 - History
 - MOS
 - Projects



Airport Solutions Existing Site

- Instrument Procedures Feasibility Study
 - Presented by Mr. Chris Pomeroy, T-O Engineers & Airport Manager

Instrument Procedures Feasibility Study

- Study purpose and process to date
 - Analyze potential approach procedure improvement options
 - Improve existing approaches or new approaches...
 - Ground based (conventional) or satellite based navigational aids (GPS)
 - Study team
 - Spohnheimer Consulting
 - Former FAA - +100 years of experience
 - Flight Procedures/TERPS/Equipment
 - T-O Engineers
 - Coordination and support
 - Team site visit – Feb. 12-13, 2013
 - Coordination with Air Carriers
 - Draft report submitted March 29, 2013

Instrument Approach Procedures (IAP) Overview

- IAP provide navigation from enroute environment to ground via instrumentation vs. visual
- IAP Terminology
 - *NAVAID - Navigational Aid*
 - Any facility used as an aid to air navigation... controlling flight in the air or the landing or takeoff of aircraft.
 - Ground based (conventional)
 - Space based
 - » Satellite Navigation

IAP Terminology

- NEXTGEN – FAA's Next Generation National Airspace System
 - *Satellite navigation*
 - *Less reliance on conventional NAVAIDS*
 - *More airports with approaches*



IAP Terminology

- TERPS - United States Terminal Instrument Procedures (FAA Order 8260.3B)
 - IAP criteria
 - **Protection of critical imaginary surfaces**
 - Obstacle clearance

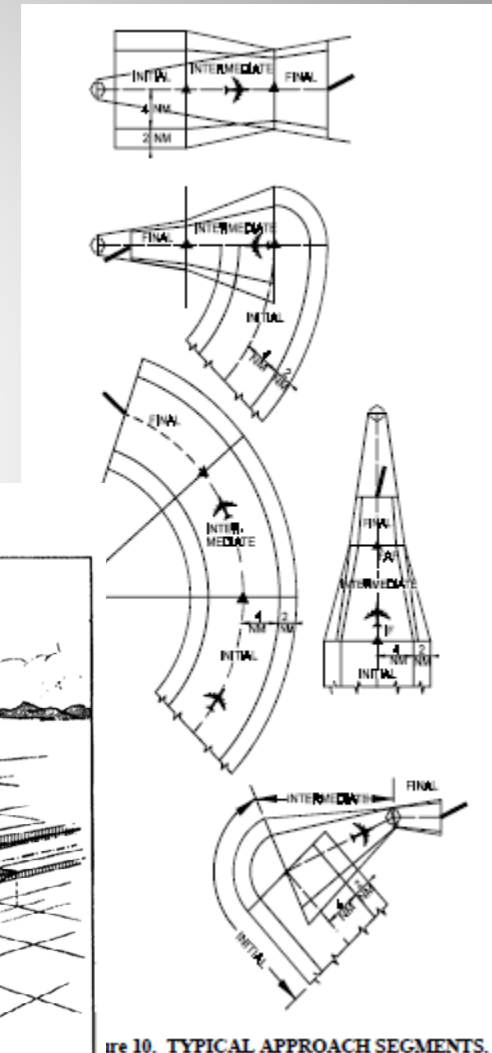
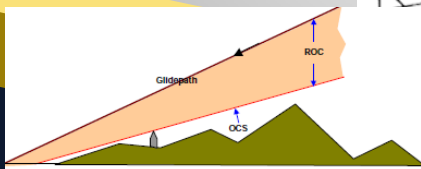
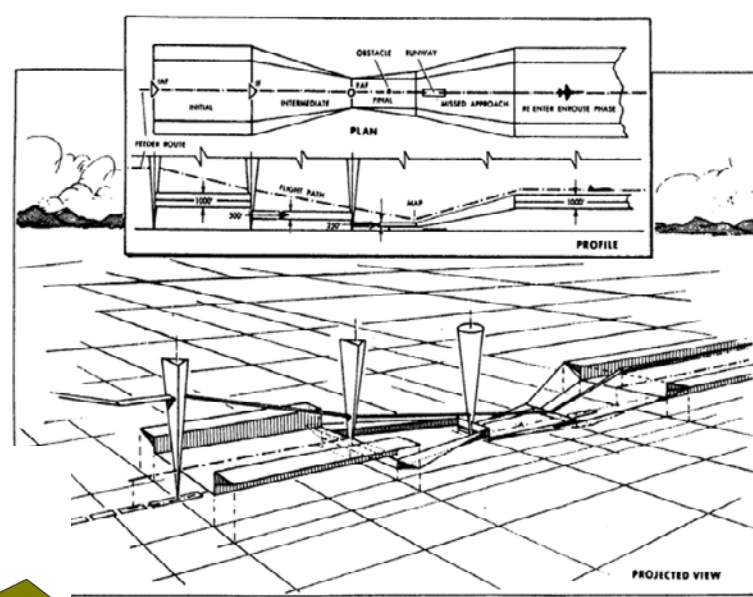


Figure 10. TYPICAL APPROACH SEGMENTS.

IAP Terminology

- *APPROACHES CAN BE SUPPORTED BY CONVENTIONAL OR NEXTGEN TECHNOLOGIES OR BOTH...*

- RNAV – Area Navigation

- Conventional

- ILS - Instrument Landing System
- VOR – VHF Omni-Directional Range
- NDB – Non-directional Beacon

- Satellite Navigation

- GPS
- RNP – Required Navigation Performance
 - » Performance Based

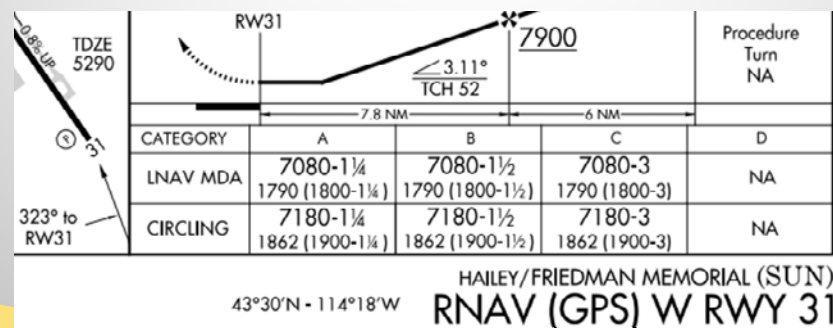
- “Straight-in” to a runway end
- Circling

SATELLITE BASED NAVIGATION/APPROACHES ARE DEPENDENT ON APPROPRIATE AIRCRAFT EQUIPAGE AND CREW TRAINING

IAP Terminology

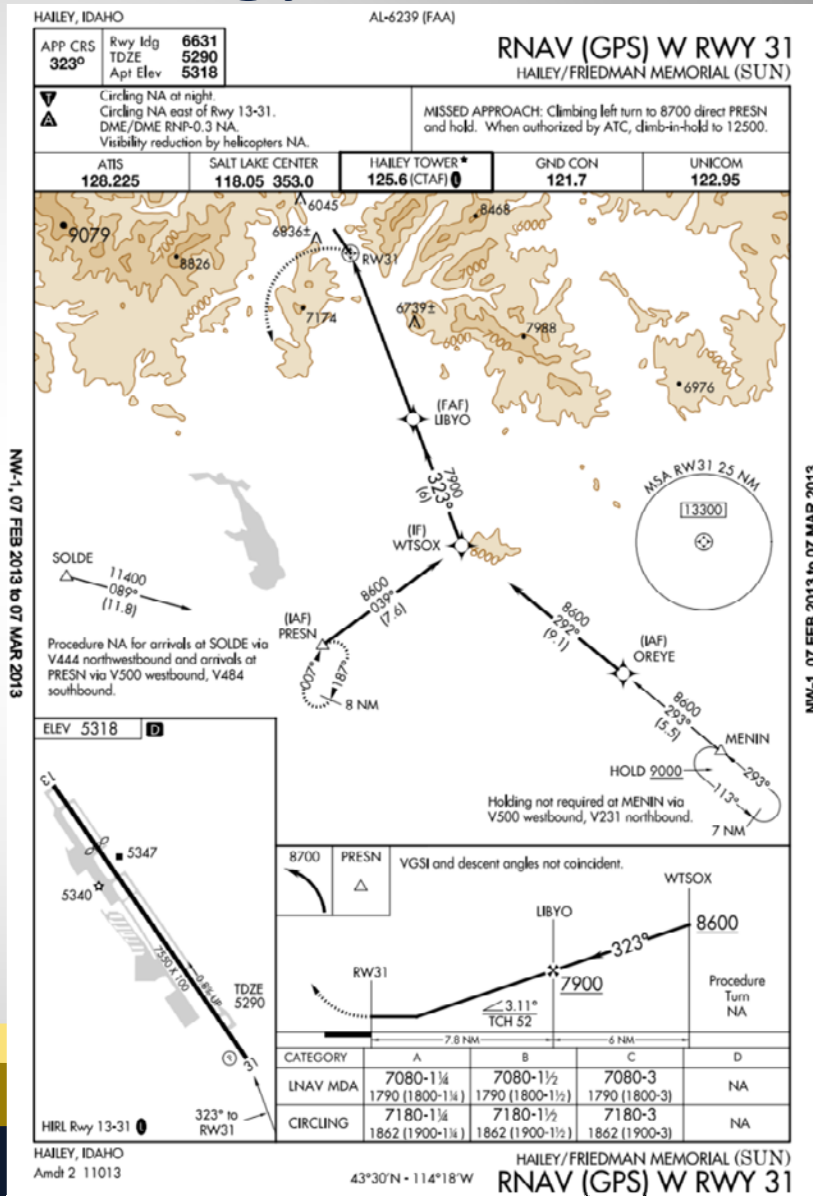
- “Approach Minimums”
 - Predetermined height above the ground
 - Visibility
 - Available NAVAID(s)
 - TERPS
 - Aircraft performance
 - DESCENT PATH
 - CLIMB GRADIENT

Lower minimums mean better aircraft access during bad weather...



IAP Terminology

- Approach plate
 - “cartoon” of the IAP procedure
 - Critical data



IAP Terminology

- Precision
 - Provides lateral and vertical guidance
 - Less than 250 ft. above the runway and lower than $\frac{3}{4}$ mile visibility
 - “Straight-in”
- Approach with vertical guidance (APV)
 - Provides lateral and vertical guidance
 - Greater than 250 ft. above the runway and greater than $\frac{3}{4}$ mile visibility
 - “Straight-in”
- Non-Precision
 - Provides lateral guidance only
 - Visibilities to 1 mile
 - Straight-in or Circling

IAP Terminology

- Public Approach
 - FAA developed - available to all user of the airport
- Authorization Required or Specials
 - Require special training and equipment
 - Specific aircraft performance requirements
 - FAA or approved FAA vendor

IAP Terminology

- Missed Approach (MAP)

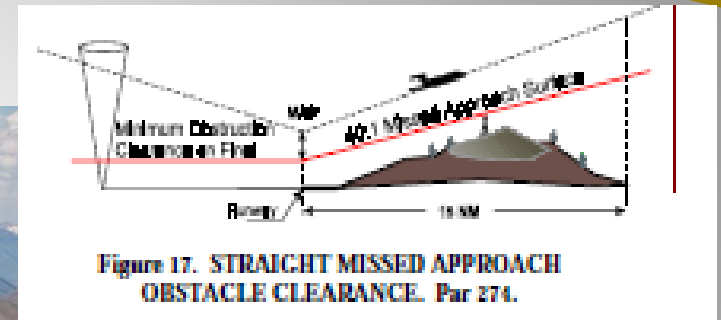


Figure 17. STRAIGHT MISSED APPROACH OBSTACLE CLEARANCE. Par 274.

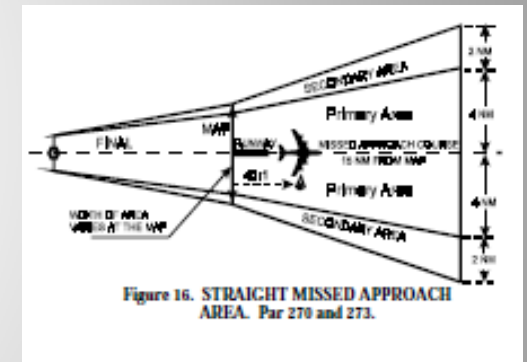
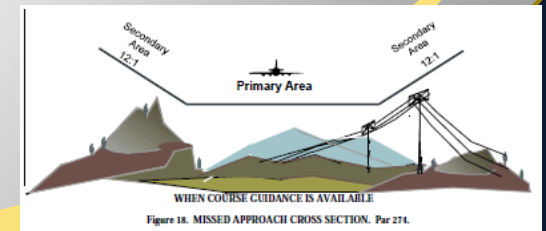


Figure 16. STRAIGHT MISSED APPROACH AREA. Par 270 and 273.

- Aircraft Performance – CLIMB GRADIENT

- Air Carriers – Single engine (SE) climb requirement
- General aviation – no SE requirement
- **“Standard” Climb Gradient – 200-350 ft/NM**



Existing SUN Approaches

IAP Name	Decision Altitude/Height (DA/H) feet	Visibility, NM	Type	Climb Gradient Required, ft/NM
RNAV (RNP) Y RWY 31 RNP 0.3	974 (1000) (Straight-in 31)	Cat A-C: 3	Special	330 to 14,000' MSL
RNAV (GPS) W RWY 31 LNAV MDA	1790 (1800) (Straight-in 31)	Cat A: 1 ¼ Cat B: 1 ½ Cat C: 3	Public	200
RNAV (GPS) X RWY 31	1610 (1700) (Straight-in 31)	Cat A: 1 ¼ Cat B: 1 ½ Cat C: 3	Special	414 to 7500' MSL
RNAV Z RWY 31 (GPS) (G4 and G5 only)	910 (1000) (Straight-in 31)	Cat C: 2	Special	385 to 10,000' MSL
NDB/DME OR GPS-A	2687 (2700) (Circling only)	Cat A-C: 5	Public	200

Study Analysis

“Best general solution is to define a public procedure that meets TERPS/obstacle clearance criteria and for which most operators are already equipped...”

- 3.6° decent path and standard climb gradient (200-350 ft/NM)
- Approaches from the north
 - Dismissed due to high descent path
 - Carrier(s) may choose to pursue using Special
- Approaches from the south
 - Focus of the analysis

Improvement Options

- New approach(es) appear feasible – ILS/LDA, LPV
- Modification of existing approaches

	Approach	Potential Minima (very approximate)	Climb Gradient Required, ft/NM	Usage
1	Offset ILS/LDA similar to GPS-W	1800-3	200	Public
2	Offset ILS/LDA similar to GPS-W	1600-3	≤240	Public
3	Offset ILS/LDA similar to GPS-W	1400-3	≤300	Public
4	Offset ILS/LDA similar to TLS & RNAV-Y	1000-3	400-450	Special
5	RNAV GPS W (modified)	1600-3	>250	Special
6	NDB/DME	2700' or 3 NM reduced?	≤240 >250	Public
7	WAAS-based LPV	1800-3	200-300	Public
8	Modify RNAV W and (future?) ILS missed approaches with navaid to the west			

Improvement Options

- ILS/LDA – Instrument Landing System/Localizer Directional Aid Solution

- Appears to provide greatest improvement opportunities

“define a public procedure that meets TERPS/obstacle clearance criteria and for which most operators are already equipped”

- Amount of improvement varies with climb gradient(s)

	Approach	Potential Minima (very approximate)	Climb Gradient Required, ft/NM	Usage
1	Offset ILS/LDA similar to GPS-W	1800-3	200	Public
2	Offset ILS/LDA similar to GPS-W	1600-3	≤240	Public
3	Offset ILS/LDA similar to GPS-W	1400-3	≤300	Public
4	Offset ILS/LDA similar to TLS & RNAV-Y	1000-3	400-450	Special

Improvement Options

- ILS/LDA – Conventional
 - Requires ground based equipment
 - Localizer array/antenna
 - Challenges with siting on-site (critical area)
 - Waiver possible due to high minimums



Improvement Options

- Additional potential improvements
 - Improve existing GPS W and NDB with increased climb gradient(s)
 - Explore new LPV approach
 - Modify MAP

5	RNAV GPS W (modified)	1600-3	>250	Special
6	NDB/DME	2700' or 3 NM reduced?	≤240 >250	Public
7	WAAS-based LPV	1800-3	200-300	Public
8	Modify RNAV W and (future?) ILS missed approaches with navaid to the west			

Conclusions

- Existing NEXTGEN approaches rarely used
 - Aircraft equipage/crew training requirements
 - Long MAP (RNP)
- Existing approaches may see benefits by:
 - Raising climb gradients
 - Reviewing offsets of the Final Approach Course(s) where applicable
 - Review of new MAP options
- New IAP options feasible
 - ILS/LDA
 - LPV

Conclusions

- ALL options:
 - Detailed TERPS analysis
 - Close and early coordination with FAA Regional Approach Procedures Team (RAPT)
 - Design and implementation of new procedures by the FAA (up to 18 months)
- Improvements are feasible
 - Expensive
 - Difficult
- FAA may not support
- Letter to the FAA requesting review of approaches

Recommendations

- Letter to the FAA requesting review of approaches
- Incorporate study findings into future planning/CIP

Retain/Improve/Develop Air Service

- FSVA Report

Airport Relocation

- EIS Termination
 - FMAA has requested that the FAA terminate the suspended Replacement Airport EIS
 - FMAA has forwarded the FAA correspondence related to the EIS suspension
 - Next steps have not been received
 - AIP '03 has been closed
 - AIP '04 is still open with significant money left for the FAA to recover

Hailey Tower Closure

March 27 – FAA issued “Contract Closure Information”

- Provided airports with “options” for tower closures.
- For airports choosing to “self-fund”, the list of tasks is overwhelming and unlikely achievable prior to the May 5 FMA Tower closure.

April 5 – FAA issued a “postponement” till June 15, of tower closure scheduling in order to further assess/review closure criteria in response to numerous legal actions initiated by airports.

Hailey Tower Closure

Based on last year's SMS/OpSpec Review and subsequent FAA approval for CRJ 700 service, SkyWest will require the same taxiway sterilization procedures for the CRJ 700 (future, anticipated service) as are in place for the Horizon Q400 with or without a tower. The service currently in place for the Q400 is the result of an FAA-approved modification of standard (MOS) and contingent on tower control. Without a tower, these aircraft may not be able to operate at FMA.

Hailey Tower Closure

- FAA has provided FMAA with a Draft Tower Service contract that would extend the tower closure 30 days, giving administrations more time to determine their direction for ATC. ATC service, as well as use of FAA equipment in the Tower is estimated to cost approx. \$50,000.00/month.

Hailey Tower Closure

- Staff believes the Board should anticipate closure of Hailey Tower; however the variables remaining in play include:
 - Outcome of FAA review of closure determinations
 - Outcome of litigation
 - Congressional action

Hailey Tower Closure

- Staff requests guidance from the Board related to the June 15 deadline.
- Temporary Funding: Should Staff begin preparing to fund tower operation and accept the FAA's offer to extend participation in the Federal Contract Tower Program (FCT) for an additional 30 days beyond June 15?
- Should Staff begin preparing to transition to a Non-Federal Contract Tower (NFCT) thru the busy summer months?

Hailey Tower Closure

- Should Staff begin preparing for a non-towered airport operation beginning June 15?
- Note: If the Board chooses a non-towered operation, the Board should not anticipate full service continuing till the June 15 deadline.

Hailey Tower Closure

- Funding issues Related to Board guidance
 - It should not be assumed that closure of the Tower will not impact the FY2013 budget
 - Funding to accept FAA's 30 day FCT offer will be between \$45,000 - \$50,000
 - Monthly funding of a NFCT operation will be approximately \$45,000 – \$50,000
 - Funding for June, July, August and September could be as high as \$200,000

Hailey Tower Closure

- FY 2013 budget line items must be amended
- Amendment of the Publicly Noticed and Board Approved expenditure level \$7,460,472.80 may not be necessary
- It may be necessary to adjust the amount of revenue that the Board might take from operational reserves
- The FY2013 Budget assumes \$5,427,771 in “C” budget expenditures

Hailey Tower Closure

- Thru March 2013, the Board has exhausted \$400,352.00 in “C” expenditures.
- The Friedman Memorial Airport Balance Sheet indicated sufficient reserves are available to fund tower operations temporarily
- Safety Area Project, Approach Improvement Possibilities, Tower Litigation and National Congressional actions dictate that long term funding considerations are appropriate for future discussions

Auto Rental Concession Lease

- Work on Auto Rental Concession bid has been delayed due to tower issues
- A lease extension thru September 30, 2013 has been prepared and has been forwarded to existing service providers

NEW BUSINESS

Maximum Takeoff Weight

- Due to changing aircraft technology, Staff and Legal Counsel have submitted the following change to the FAA's Airport Facility Directory:
- "Rwys 13/31 limited to acft not exceeding 95,000 lbs certificated mtow – dual wheel. Acft with published mtow exceeding 95,000 lbs must seek prior permission by submitting to arpt mgr a manufacture's acft service change that installs a placard verifying acft is certificated for SUN with a mtow of 95,000 lbs/or less – dual wheel. Aircraft desiring to operate using actual weight in lieu of mtow need documentation and prior permission form arpt mgr at (208)-788-9003."



Public Comment



Thank you

