

<b>Flight Procedure Tracking Form</b>		<b>Action:</b> FLIGHT CHECK	<b>Task Type:</b> IAP	<b>Date Open:</b> 09/18/2017	<b>Task #:</b> 2017091828493201001	<b>Request #:</b> 20170918284932
<b>Procedure:</b> ILS OR LOC RWY 27 AMDT 11			<b>Airport ID:</b> KDLH	<b>Airport:</b> DULUTH INTL		<b>Reimbursable #:</b> NO
<b>City:</b> DULUTH	<b>ST:</b> MN	<b>GPS #:</b>	<b>Estimated Chart Date:</b> 10/10/2019		<b>FICO #:</b> 1230527	
<b>Fac ID:</b> JUD		<b>Fac. Type:</b> ILS			<b>Specialist:</b> RUSSELL ROSLEWSKI	
<b>Procedure Review</b>						
	<b>Rec'd</b>	<b>Rel'd</b>	<b>Full Name</b>	<b>Comments</b>		
<b>Lead:</b>	04/15/2019	07/12/2019	BEV L BORDY	<div>QUALITY</div> <div>10</div> <div>CHECKED</div>		
<b>QA:</b>	07/12/2019	07/12/2019	BEV L BORDY			
<b>Liaison:</b>	07/12/2019	07/12/2019	MARY MCDONALD			
<b>Procedure Comments:</b> ENROUTE-NON <b>Remark Type:</b> INFORMATION  HARD DATE  WAIVER - EXCESSIVE TCH  DAVE DANNER, 405-954-4077  8/13/19: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 7/12/19: 1. ADDITIONAL FLIGHT DATA, ADDED "CHART: ASR" - ASR MINIMUMS PUBLISHED ON 6/20/19.						

**1. FLIGHT PROCEDURE IDENTIFICATION:**

Duluth, MN  
Duluth Intl  
ILS OR LOC RWY 27

**2. WAIVER REQUIRED AND APPLICABLE STANDARD:**

TCH of 80.197 feet exceeds 60 feet. FAAO 8260.3D, para 10-1-4b(1).

**3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):**

The glideslope cannot be relocated to improve the crossing height due to an intervening taxiway. Facility waiver for TCH approved 6/10/1974 for previous value of 85 feet.

**4. EQUIVALENT LEVEL OF SAFETY PROVIDED:**

Available runway length after ground point of intercept is 8532 feet.

Approach lighting system credit not authorized.

230 ft HAT published for Cat C/D/E based on previous waiver approval.

**5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:**

Relocation is not possible due to intervening taxiway.

**6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):**

**7. SUBMITTED BY: Lonnie Everhart**

DATE	OFFICE IDENTIFICATION	TITLE
	AJV-A	Manager

**SIGNATURE**

*Digitally signed by*

**DAVID DANNER**

Jul 12, 2019

**8. AFS ACTIONS:**

☐ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

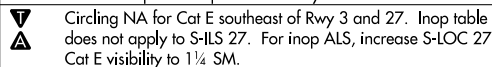
**COMMENTS:**

DATE	ROUTING SYMBOL	SIGNATURE
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FIG

ILS or LOC RWY 27  
DULUTH INTL (DLH)

**MISSED APPROACH:** Climb to 3000 then climbing right turn to 4500 on heading 060° and DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.



ALTERNATE  
MISSED APCH FIX  
(093°T) 

110.8 HIB (121°T)  
Chan 45 R 


PROTOTYPE-NOT FOR  
NAVIGATION

(093°T)  
 093°  
 (273°T)  
 273°  
 PYKLA  
 379 DL  
 RADAR

LOCALIZER 108.7  
I-JUD ::--

— LOM —  
PYKLA  
79 DL —::  
RADAR

Procedure NA for arrival on DLH Vortac  
airway radials 046 CW 116.

DULUTH  
112.6 DLH   
Chan 73

ELEV 1428	<b>D</b>	TDZE 1421
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273° 5.2 NM  
from FAF

TDZ/CL Rwy 9  
REIL Rwy 3 and 21  
HIRL Rwy 3-21 and 9-27

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

Amdt 11 FIG

3000	4500	DLH R-017	CHERL INT
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↑  
hdg  
060°

VGS1 and ILS glidepath not coincident  
(VGS1 Angle 3.00°/TCH 9%).

ANDOE OM  
RADAR

3154

(092°T)  
093°

Remain  
within 15 NM

(272°T)  
273°

3200

3200

GS 3.00°  
TCH 80

		5.2 NM				
CATEGORY	A	B	C	D	E	
S-ILS 27	1621/40	200 (200-¾)	1651/40	230 (300-¾)		
S-LOC 27	1860/24	439 (500-½)	1860/40	439 (500-¾)		
<b>C</b> CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3	972 (1000-3)	

Amdt 11 FIG

46°51'N-92°12'W

DULUTH INTL (DLH)  
ILS or LOC RWY 27

LOC I-JUD	APP CRS	Rwy Idg	<b>10162</b>
<b><u>108.7</u></b>	<b>273°</b>	TDZE	<b>1421</b>
		Apt Elev	<b>1428</b>

ILS or LOC RWY 27  
DULUTH INTL (DLH)

**T** Inop table does not apply to S-ILS 27. Circling NA for Cat E  
**A** southeast of Rwy 3-27. For inop ALS, increase S-LOC 27  
 ASR Cat E visibility to 1<sup>3</sup>/<sub>8</sub> SM.



**MISSED APPROACH:** Climb to 3000 then climbing right turn to 4500 on heading 060° and on DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS  
124.1 270.1

DULUTH APP CON  
125.45 233.7

DULUTH TOWER  
118.3 257.8


GND CON  
121.9 348.6


ALTERNATE  
MISSED APCH FIX



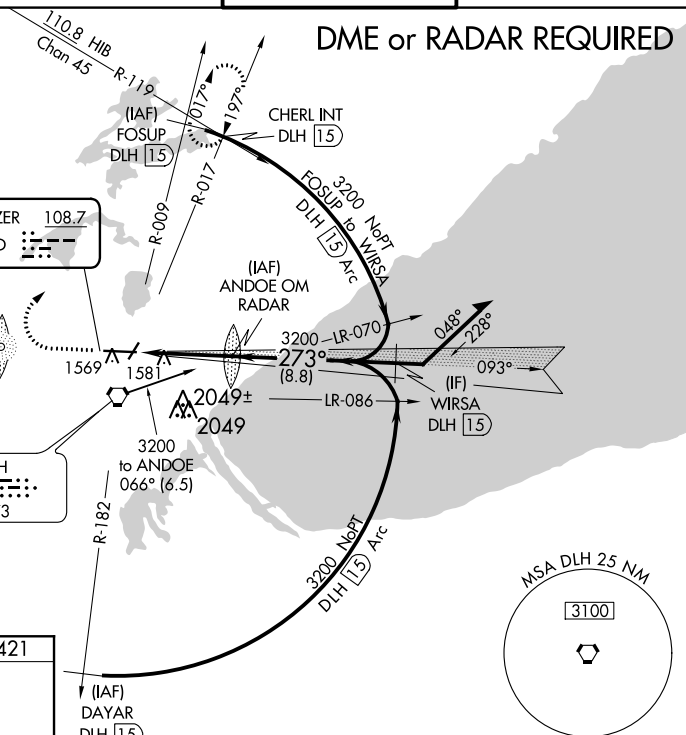
379 PYKLA DL  $\frac{1}{2}::.$   
RADAR

LOCALIZER 108.7  
I-JUD

LOM  
PYKLA  
379 DL   
RADAR

DULUTH  
112.6 DLH   
Class 73

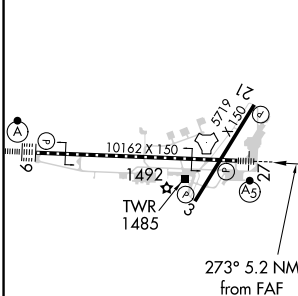
DME or RADAR REQUIRED



MSA DLH 25 NM

3100

ELEV 1428	<b>D</b>	TDZE 1421
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TDZ/CL Rwy 9  
REIL Rwy 3 and 21  
HRL Rwy 3-21 and 9-27

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

DULUTH, MINNESOTA

Amdt 10C 19JUL18


3000 ↑	4500 hdg 060°	DLH R-017	CHERL INT
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VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 96).

ANDOE OM

Remain  
within 15 NM

093°  
273°  
3200  
3200  
GS 3.00°  
TCH 85

CATEGORY	5.2 NM		C	D	E
	A	B			
S-ILS 27	1621/40	200 (200-¾)	1651/40	230 (300-¾)	
S-LOC 27	1860/24	439 (500-½)	1860/45	439 (500-¾)	
 CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-½)	2400-3	972 (1000-3)

DULUTH INTL (DLH)

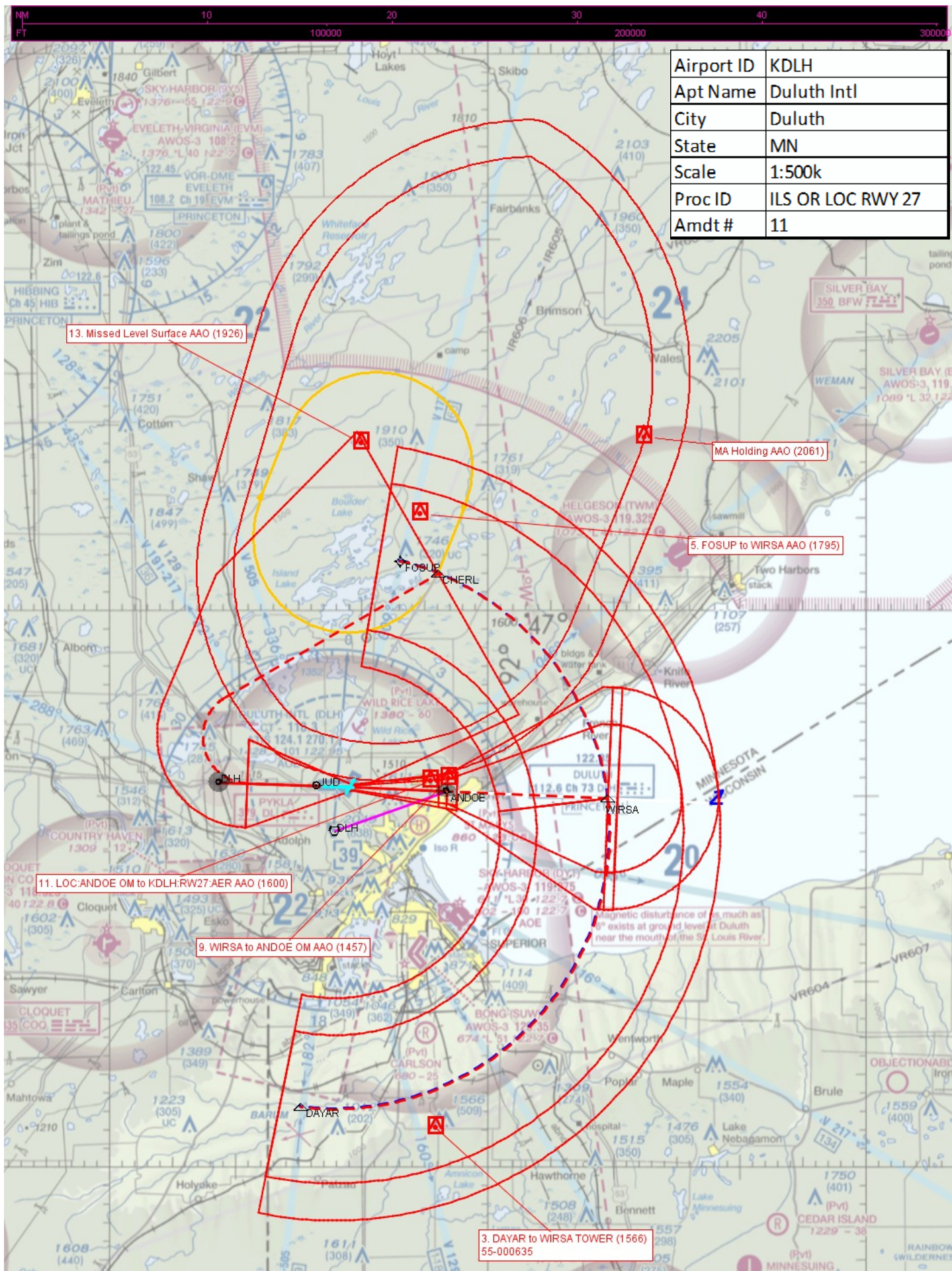
ILS or LOC RWY 27

46°51'N-92°12'W

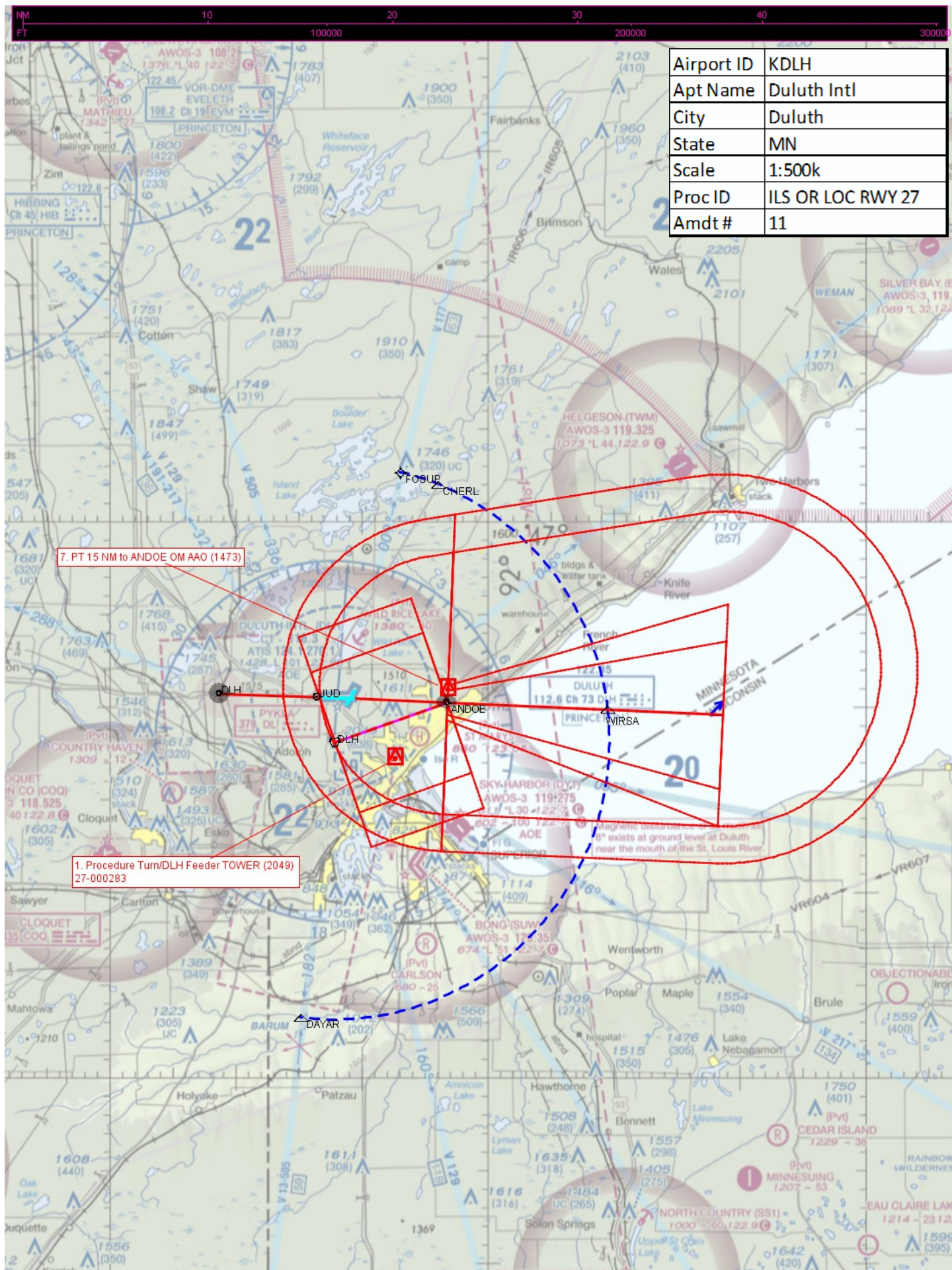
NC-1, 25 APR 2019 to 23 MAY 2019

NC-1, 25 APR 2019 to 23 MAY 2019

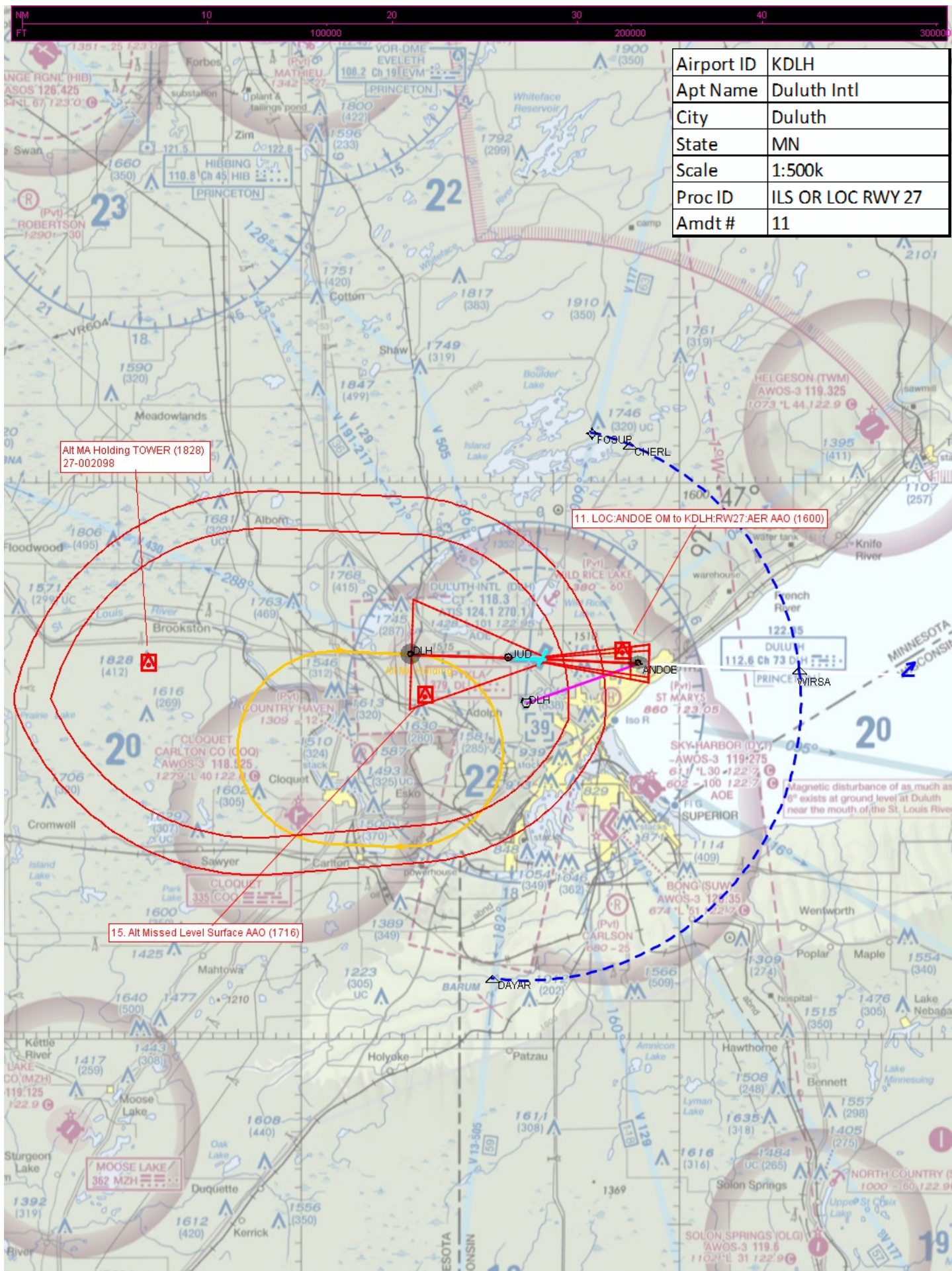












Airport ID	KDLH
Apt Name	Duluth Intl
City	Duluth
State	MN
Scale	1:500k
Proc ID	ILS OR LOC RWY 27
Amdt #	11

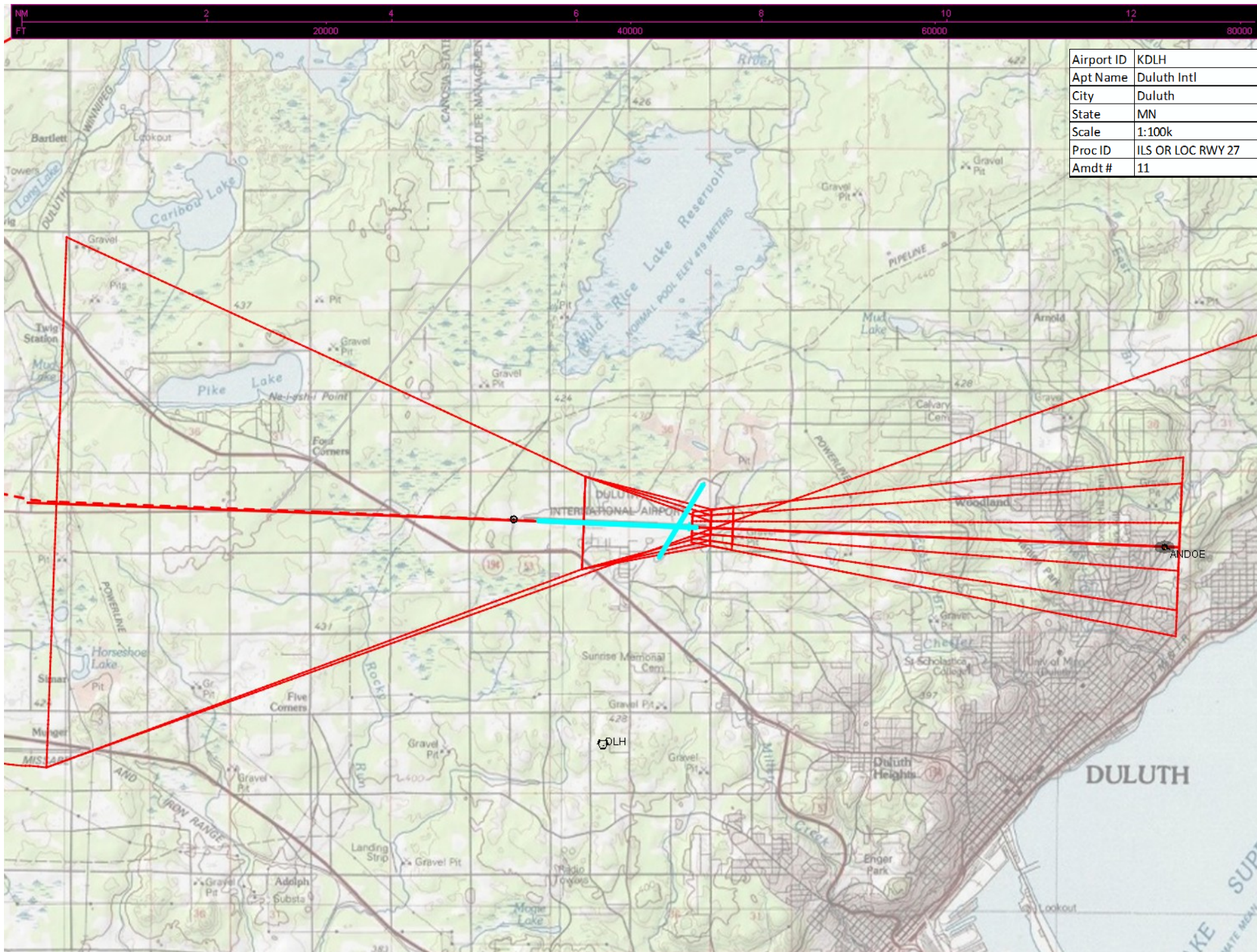
Alt MA Holding TOWER (1828)  
27-002098

11. LOC:ANDOE OM to KDLH:RWY27:AER AAO (1600)

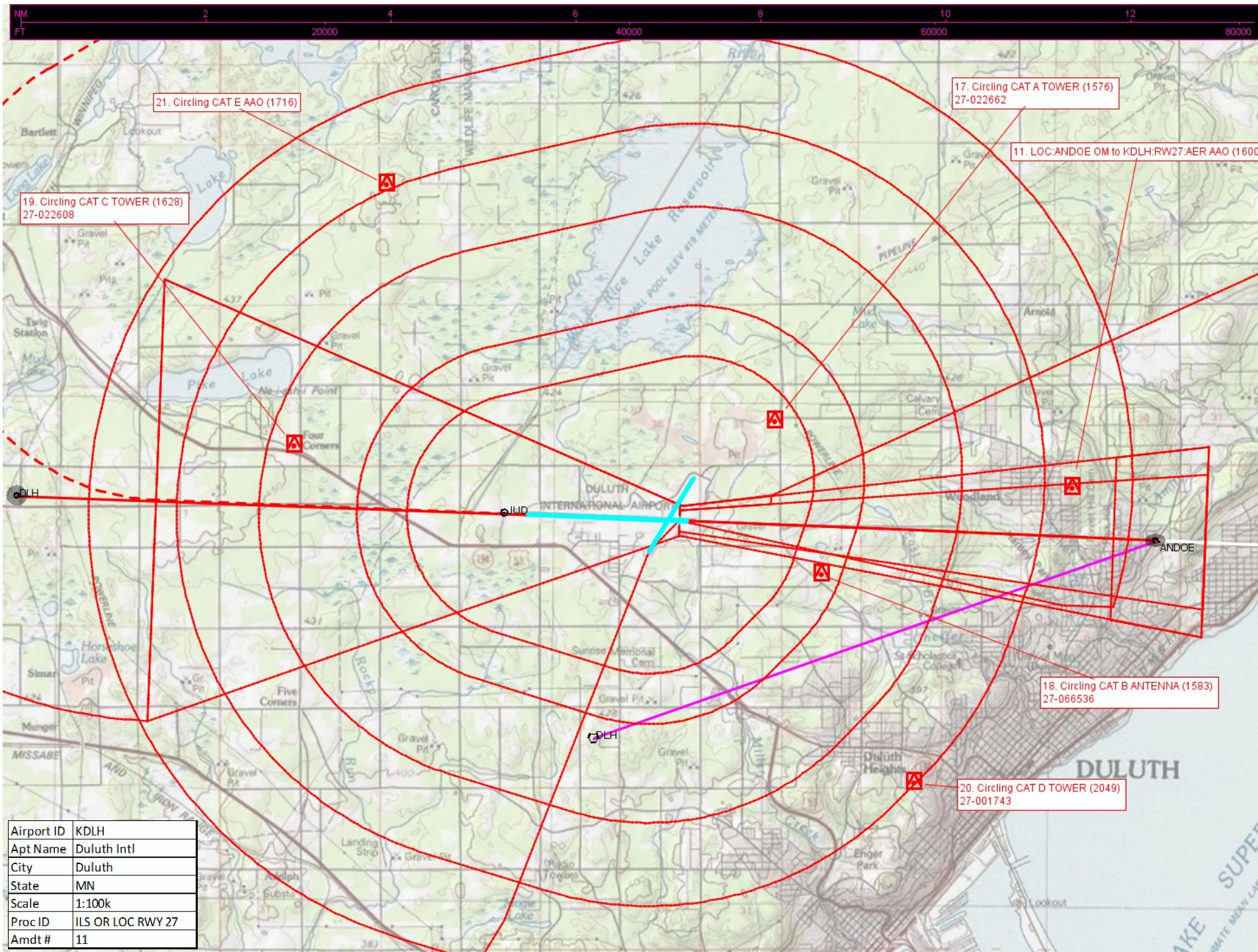
15. Alt Missed Level Surface AAO (1716)

Magnetic disturbance of as much as  
6° exists at ground level at Duluth  
near the mouth of the St. Louis River.

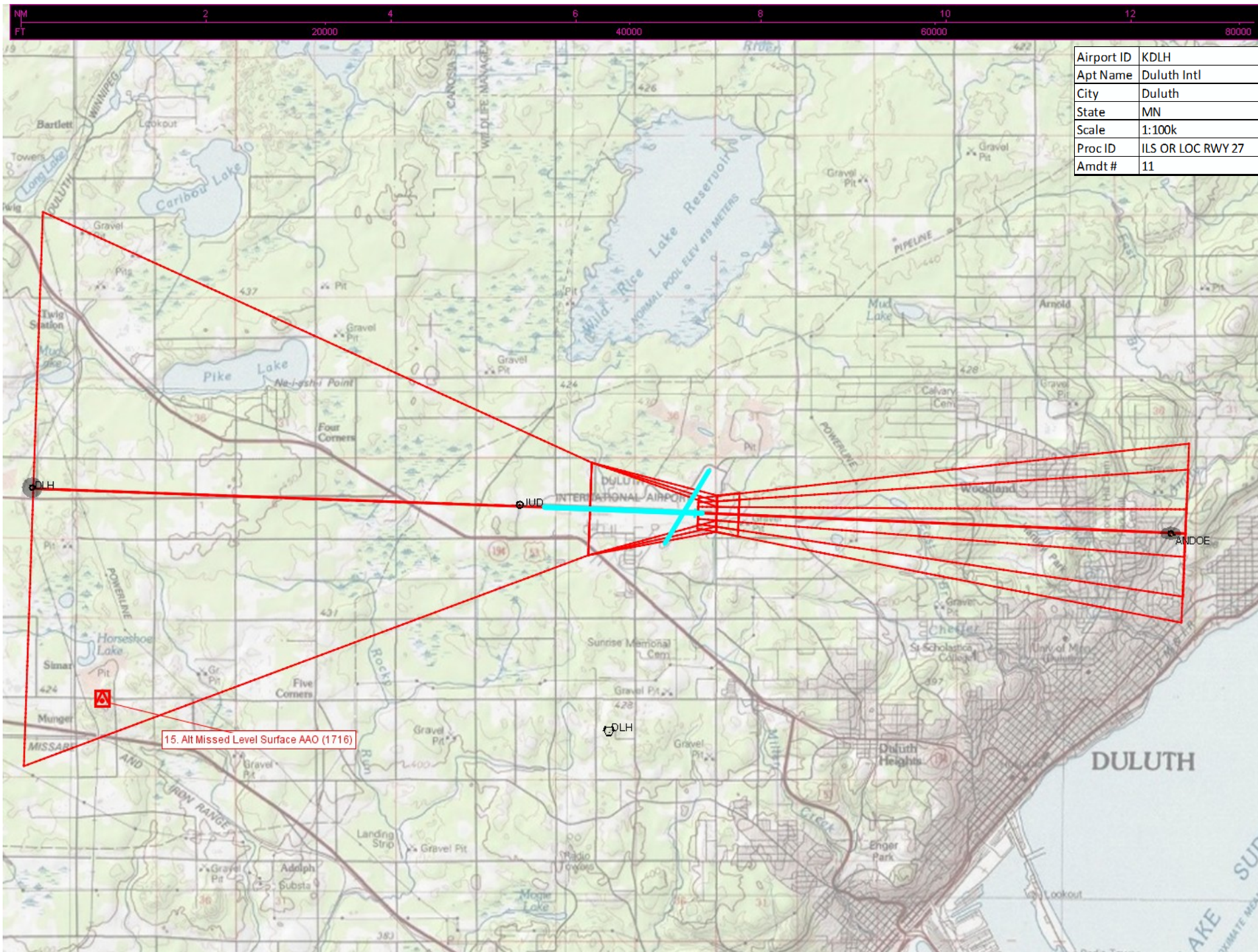






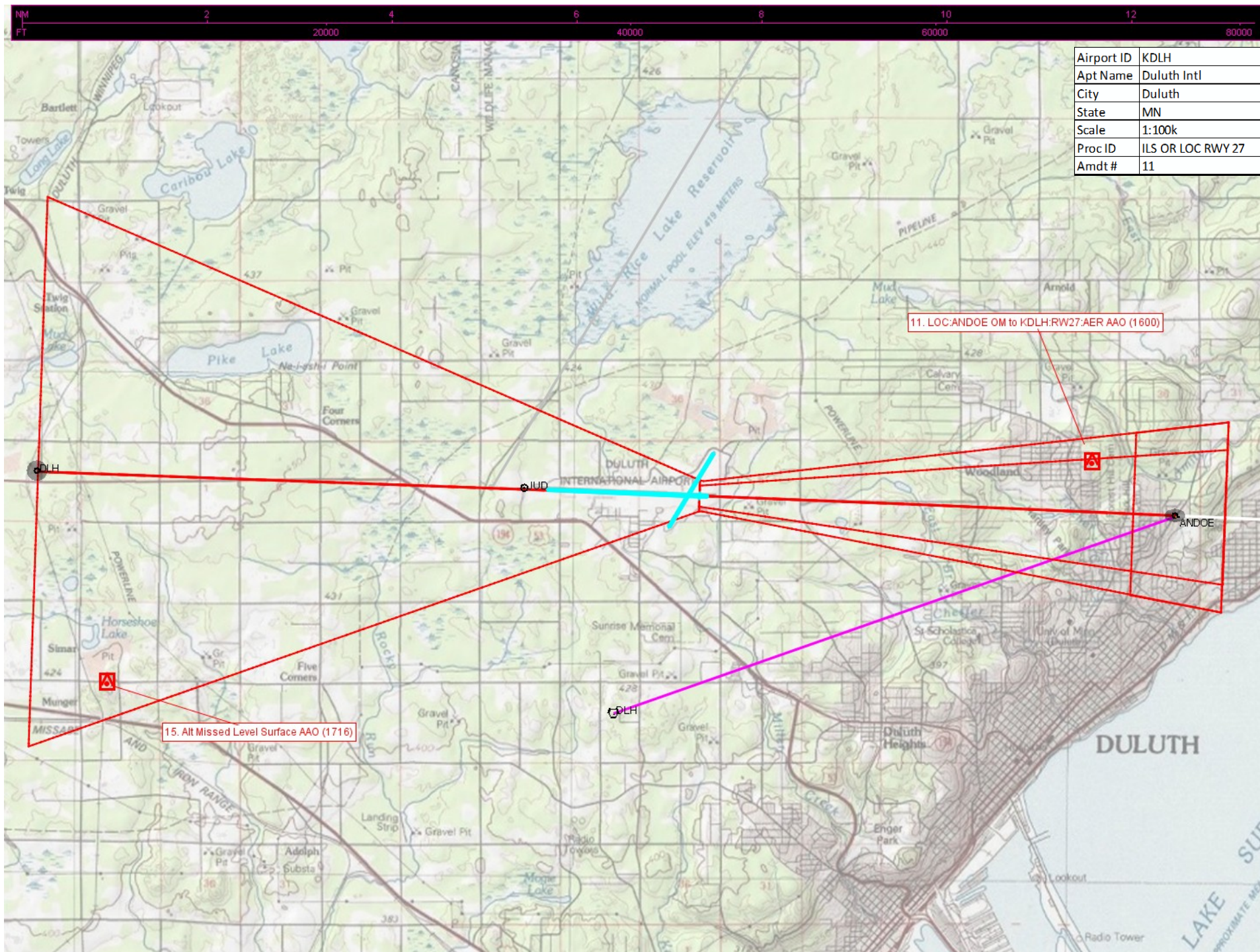






Airport ID	KDLH
Apt Name	Duluth Intl
City	Duluth
State	MN
Scale	1:100k
Proc ID	ILS OR LOC RWY 27
Amdt #	11





**FEDERAL AVIATION ADMINISTRATION  
CATEGORICAL EXCLUSION DECLARATION  
Proposed Procedure Changes at Duluth International Airport (KDLH), Duluth, MN**

**Background:**

Duluth International Airport (KDLH) in Duluth, Minnesota is reconstructing Runway 9/27 in four phases on existing airport property. Phase 3 under a 2018 federal fiscal year grant reconstructs the east portion of Runway 9/27. The Federal Aviation Administration's (FAA) Airport Division issued a Categorical Exclusion (CatEx) for ground work on June 2, 2017. The CatEx contained conditions on the need for amendments to existing Instrument Flight Procedures (IFPs). Noise impacts are not expected to increase at any noise-sensitive areas. The proposal does not exceed the threshold for cumulative noise impacts and is compatible with adjacent land uses.

**Description of Action:**

This action proposes the amendment of three (3) procedures. The FAA does not anticipate any lowering of altitudes over noise sensitive areas with these changes.

- **RNAV GPS RWY 27** – Procedure is being amended concurrent with runway construction in that the threshold is being displaced by 100 feet. This affect the location of the Final Approach Fix by 100 feet as well. There will be no changes to flight path or altitudes.
- **ILS OR LOC RWY 27 and COPTER ILS OR LOC RWY 27** - Procedure is being amended concurrent with runway construction in that the threshold is being displaced by 100 feet. The procedure Threshold Crossing Height (TCH) has changed from 85 to 81 feet; due to the threshold moving and changes where the glide path intercept point on the runway is located. The Final approach fix will not move because it is the Outer Marker (OM). The ILS glide path intercept point will move slightly for the runway shift and TCH change. There will be no changes to flight path or altitudes.
- **Departures RWY 9** – IFR Takeoff Minimums and (Obstacle) Departure Procedure is being updated concerning only obstacle distance because the threshold is being displaced by 100 feet.

**Declaration of Exclusion**

The FAA has reviewed the above referenced proposed action and it has been determined, by the undersigned, to be categorically excluded from further environmental documentation according to Order 1050. I F, "Environmental Impacts: Policies and Procedures". The implementation of this action will not result in any extraordinary circumstances in accordance with Order 1050. I F.



**Basis for this Determination**

An environmental review was conducted in accordance with policies and procedures in Department of Transportation Order 5610. I C, "Procedures for Considering Environmental Impacts" and FAA Order 1050. IF.

The applicable categorical exclusions are FAAO 1050. I F 5-6.5

- *j. Implementation of procedures to respond to emergency air or ground safety needs, accidents, or natural events with no reasonably foreseeable long-term adverse impacts (ATO)*
- *k. Publication of existing air traffic control procedures that do not essentially change existing tracks, create new tracks, change altitude, or change concentration of aircraft on these tracks. (ATO, AVS)*

**Recommended by:**

**Signature:** Jennifer Denise Sheetz Digitally signed by Jennifer Denise Sheetz  
Date: 2019.04.30 13:34:19 -05'00'

**Title:** Jennifer Sheetz,  
NISC Contractor, Environmental Specialist, ATO Central Service Center, AJV-C2

**Approved By:**

**Signature:** For: JOHN A WITUCKI Digitally signed by JOHN A WITUCKI  
Date: 2019.05.01 11:50:38 -05'00'

**Title:** Steve Szukala,  
Manager (A), Operations Support Group, ATO Central Service Center, AJV-C2