DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS – M.S. #40 1120 N STREET P. O. BOX 942874 SACRAMENTO, CA 94274-0001 PHONE (916) 654-4959 FAX (916) 653-9531 TTY 711 www.dot.ca.gov



Swansboro Country Airport El Dorado County Suspense: February 28, 2019

January 14, 2019

Mr. Connell Persico, President SCPOA Board of Directors PO BOX 1459 Folsom, CA 95763-1459

Dear Mr. Persico:

The California Department of Transportation, Division of Aeronautics (Caltrans), conducted a State permit compliance inspection and Federal Aviation Administration (FAA) Airport Master Record (Form 5010-1) update of the Swansboro Country Airport (FAA Site No. 02051.2*A) on December 20, 2018. We appreciate the cordial welcome and assistance Board Members provided during our visit. The updated information will be entered into State and FAA Airport Master Records.

Caltrans conducted this inspection at the request of the SCPOA Board of Directors with the purpose of evaluating compliance with permitting conditions and enhancing safety at the airport. The airport was evaluated using the current State Airport Permit dated December 18, 1990, and the original permit dated October 23, 1978, in accordance with standards defined in FAA Advisory Circular (AC) 150/5300-4B, *Airport Design*, June 24, 1975.

Both permits contain several variances granted for obstructions which penetrate Federal Aviation Regulations (FAR) Part 77 imaginary surfaces. Variances were granted for obstructions in the primary surface, approach, and transitional surfaces. These varianced obstructions have grown in intensity over the past 41 years and when combined with inadequate Runway Safety Areas (RSA) could be considered hazardous.

We recommend and encourage the SCPOA Board of Directors to mitigate the following safety items, varianced or not, which we now bring to your attention:

1. The RSA at the Runway 9 Approach end drops-off and does not meet standards in effect when the airport was permitted in 1978. In accordance with AC 150/5300-4B, *Airport Design*, June 24, 1975, the airport is required to maintain adequate RSAs of 120 feet wide and 240 feet from each runway end.

RSAs are rectangular areas, centered on the runway centerline. The portion abutting the edge of the runway shoulders, runway ends, and stopways must be cleared, drained, graded, and usually turfed. The RSA is capable of supporting snow removal, firefighting, and rescue equipment and accommodating the occasional passage of aircraft without causing major damage to the aircraft.

We recommend re-marking the Runway 9 Approach end by painting a yellow demarcation bar 240 feet to the east of the current runway end in accordance with AC 150/5340-1L, Standards

for Airport Markings, Chapter 2, section 2.9, and Figures A-8 and A-10. The Runway 9 Displaced Threshold would remain in the same location, shortening the displacement to 70 feet. This re-marking would result in a total runway length of 2,960 feet.

Runway 9/27 would need to be re-marked in accordance with AC 150/5340-1L, and a survey conducted on both the new and existing runway ends and displaced thresholds. Then the survey data would need to be submitted on the FAA's Obstruction Evaluation/Airport Airspace Analysis website (https://oeaaa.faa.gov/oeaaa/external/portal.jsp) at the "Add New Case (On Airport)" tab, to update the Form 5010-1. In addition, an Amended/Corrected Airport Permit-Application Form, DOA-0103 (enclosed) would need to be submitted to this office to reflect the change in runway length and displacement.

- 2. Structures, trees, brush, and areas of high ground along both sides and down the entire length of Runway 9/27 are within the Federal Aviation Regulation (FAR) Part 77, Primary Surface (please see enclosed Photographs 1 through 7). The Primary Surface extends 200 feet beyond each runway end, 125 feet each side of the runway centerline, with an elevation equal to the nearest point on the runway centerline. Although, some of the following items were varianced for aircraft parking we recommend mitigating each to the degree possible:
 - a. Terrain on the north side of the runway abeam of the Runway 27 Displaced Threshold to Sluice Street penetrates the Primary Surface at 60 feet from the runway centerline (please see enclosed Photograph 2). We recommend keeping the area clear of rocks and tall grass by grading the area as close to runway height as practicable.
 - b. A utility pole and a structure abeam and 115 feet north of the Runway 27 Displaced Threshold penetrates the Primary Surface by 10 feet (please see enclosed Photograph 3). We recommend you work with the homeowner and the power provider to relocate the pole and structure clear of the primary surface.
 - c. Trees, brush, and high ground penetrate the Primary Surface on the north side of the runway and from 450 to 1,300 feet west of the Runway 27 Displaced Threshold (please see enclosed Photograph 4). At a minimum, this area should be kept clear of trees and brush with the artificial raised berm graded flush to the elevation of the runway centerline.
 - d. Small trees, brush, and high ground penetrate the Primary Surface on the north side of the runway from 450 to 885 feet east of the Runway 9 Displaced Threshold (please see enclosed Photograph 5). Although Lot 60 is varianced for aircraft parking, at a minimum this area should be kept clear of trees and brush.
 - e. Small trees, brush, and high ground penetrate the Primary Surface on the south side of the runway from 300 feet west of the Runway 9 Displaced Threshold to the edge of the westernmost pond (please see enclosed Photograph 6). Although Lot 10 and 710 are varianced for aircraft parking, at a minimum this area should be kept clear of trees and brush.

- f. Small trees, brush, and high ground penetrate the Primary Surface on the south side of the runway from 580 to 770 feet east of the Runway 9 Displaced Threshold (please see enclosed Photograph 7). At a minimum this area should be kept clear of trees and brush.
- 3. Trees and high ground from the Runway 27 Displaced Threshold to 950 feet east of the Displaced Threshold penetrate the FAR Part 77, 20:1 Approach and 7:1 Transitional Surfaces (please see enclosed Photograph 8). Trees and high ground in the Approach and Transitional Surfaces were varianced in 1978. However, the trees have grown significantly in the intervening 41 years, coupled with high ground north of the Displaced Threshold and 950 feet east of the Displaced Threshold penetrating the Approach Surface, and now constitute a potential hazard to approaching traffic. We recommend that the trees be trimmed as shown in enclosed Photograph 8 or be removed, and the area from the Displaced Threshold to Sluice Street graded down as close to the runway centerline elevation as possible to provide a clear approach for incoming traffic.
- 4. Two redwoods, specifically varianced in 1978 when each was 70 feet in height, are now well over 100 feet in height and constitute a significant obstruction hazard. Located 800 feet east of the Runway 27 Displaced Threshold and 155 feet south of the extended runway centerline, these trees penetrate the Transitional Surface by over 60 feet. These trees are located just outside and to the left of the Runway 27 Approach Surface close to aircraft performing normal traffic pattern operations. We recommend that these trees be trimmed as shown in enclosed Photograph 9 or be removed as soon as possible.
- 5. Trees, brush, and terrain 75 to 550 feet west of the Runway 9 Displaced Threshold penetrate the FAR Part 77, 20:1 Approach and the 7:1 Transitional Surfaces. Although, a variance exists for aircraft parking in Lots 10 and 718, terrain penetrates the Approach Surface at 75 feet west of the Runway 9 Displaced Threshold to the runway end as close as 55 feet south from the runway centerline. We recommend this area be graded level to the elevation of the runway centerline to provide a clear approach for incoming traffic. Additionally, both Transitional Surfaces are varianced, however, many trees are taller than when the variance was granted in 1978 with many trees now penetrating both the Approach and Transitional Surfaces by more than 50 feet. At a minimum, trees in the Approach Surface must be trimmed, and Transitional Surface penetrations should be trimmed as shown in enclosed Photograph 10 or be removed.
- 6. Structures, trees, brush, and areas of raised terrain on both sides and down the entire length of Runway 9/27 penetrate the FAR Part 77, Transitional Surface. Trees, high ground, a hangar, and parked aircraft in the Transitional Surfaces are varianced on both sides of the runway. However, comparing photographs taken during the inspection (please see enclosed Photographs 11 and 12) to those taken in 1976, trees adjacent to the runway have grown in number and are substantially higher. We recommend that these trees be trimmed as shown in enclosed Photographs 11 and 12 or be removed to be clear of the Transitional Surface as soon as possible.
- 7. Both displaced thresholds are mis-marked with the arrowheads painted yellow instead of the standard white. Both displaced threshold arrow heads should be painted white in accordance

Mr. Connell Persico January 14, 2019 Page 4

with FAA AC 150/5340-1L, Chapter 2, section 2.9, and Figures A-7 and A-10 as soon as possible.

It is Caltrans' objective to ensure that airports and heliports meet all applicable FAA minimum design safety standards and FAA AC criteria, FAR, the California Public Utilities Code, section 21001 et seq., CCR, Title 21, sections 3525-3560, and all required conditions depicted in your State Airport Permit issued by Caltrans. Airport permit criteria, including many FAA ACs, may be found on our website at www.dot.ca.gov/aeronautics.

Please notify us by February 28, 2019, of your intended or completed action concerning these items, and provide us with photographic evidence documenting the results of the completed items.

Caltrans is pleased to offer our technical assistance to the Swansboro Country Airport. If you have questions or we may be of further assistance, please contact me at (916) 654-5450 or via email at christopher.brooks@dot.ca.gov.

Sincerely,

Original signed by

CHRISTOPHER BROOKS

Aviation Safety Officer

Enclosures

c: FAA SFO ADO

bc: Gary Cathey, Acting Deputy District Director, District 3

ChrisBrooks:do U:\\z\ArptInspect\ElDoradoCnty_SwansboroCountryArpt Inspt 011419

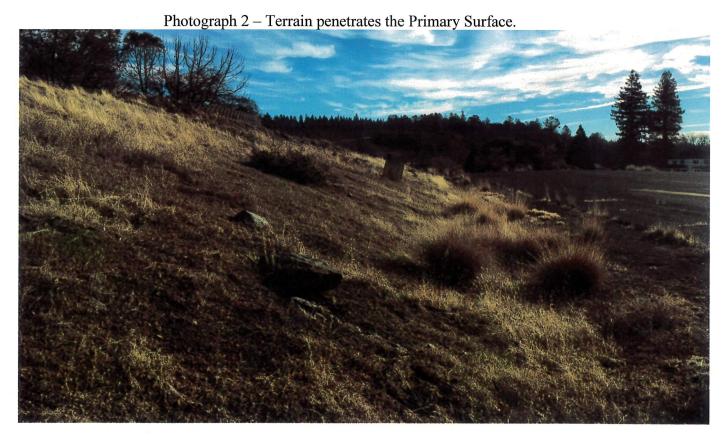
Photograph 1 - Penetrations of the Primary Surface

Trees and Brush in the Primary Surface

Primary Surface

Blevation of terrain above the Primary Surface

Elevation of terrain above the Primary Surface



"Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability"

Photograph 3 - Pole and Structure 118 feet north of Runway 9/27 penetrates the Primary Surface.

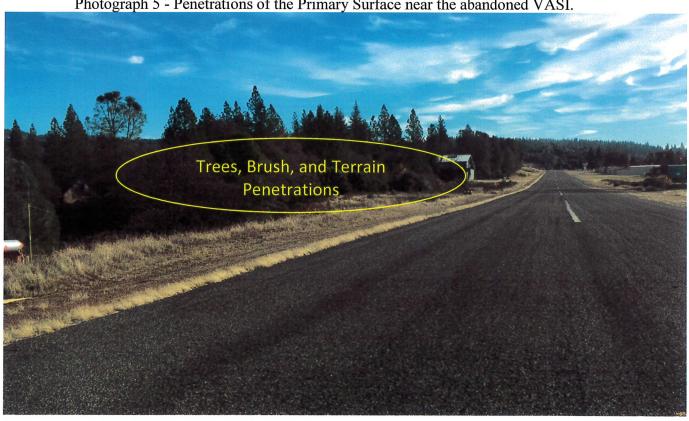


Photograph 4 - Penetrations of the Primary Surface north side of Runway 9/27

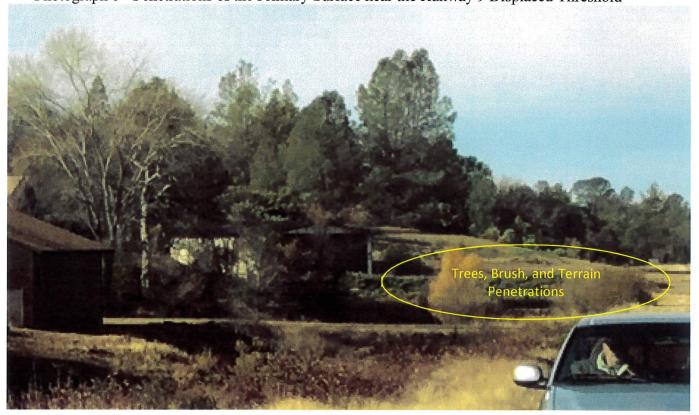


"Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability"

Photograph 5 - Penetrations of the Primary Surface near the abandoned VASI.



Photograph 6 - Penetrations of the Primary Surface near the Runway 9 Displaced Threshold



"Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability"

Photograph 7 - Penetrations of the Primary Surface near the ponds



Photograph 8 – Trees, brush, and high ground penetrate the Approach and Transitional Surfaces.

Approximate height of the 7:1
Transitional Surface at 540 feet from the Runway 27 Displaced Threshold

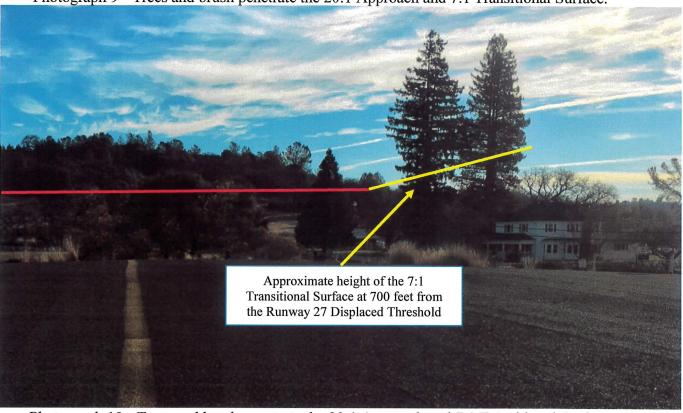
High Ground

Approximate height of the 20:1
Approach Surface at 540 feet from the Runway 27 Displaced Threshold

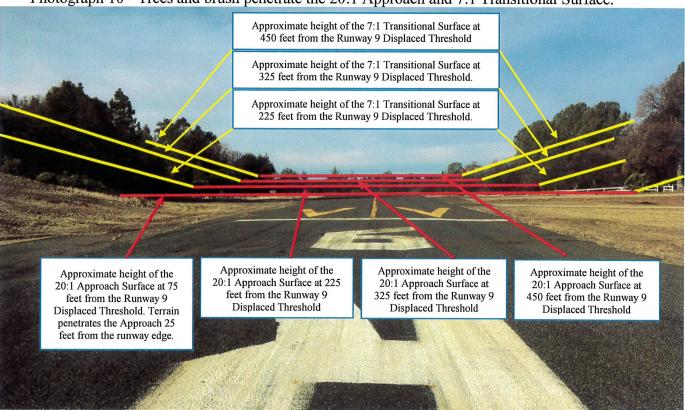
Approximate height of the 20:1
Approach Surface at 540 feet from the Runway 27 Displaced Threshold

Approximate height of the 20:1
Approach Surface at 540 feet from the Runway 27 Displaced Threshold

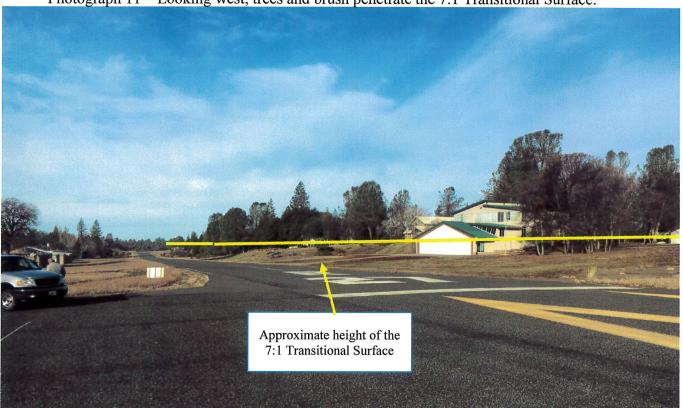
Photograph 9 - Trees and brush penetrate the 20:1 Approach and 7:1 Transitional Surface.



Photograph 10 - Trees and brush penetrate the 20:1 Approach and 7:1 Transitional Surface.



Photograph 11 – Looking west, trees and brush penetrate the 7:1 Transitional Surface.



Photograph 12 – Looking east, trees and brush penetrate the 7:1 Transitional Surface.



"Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability"

AMENDED/CORRECTED AIRPORT PERMIT - APPLICATION DOA-0103 (REV. 10/96) Front

PLEASE PRINT OR TYPE		
	RAL INFORMATION	
AIRPORT NAME Swansboro Country Airport		PERMIT NUMBER ED-07
PART II. COMPLETE IF CHANG CORRECTED PERMIT - FOR A CHANGE IN OWNERSHIP, SUB	GE OF AIRPORT NAME OF MIT PROOF OF OWNERSHIP (deed,	ROWNER lease, other) WITH APPLICATION
NEW AIRPORT NAME		
NEW OWNER'S NAME		
NEW OWNER'S ADDRESS		
BUSINESS TELEPHONE NUMBER	FAX NUMBER	
AGENT'S NAME (if applicable)		
AGENT'S ADDRESS		
BUSINESS TELEPHONE NUMBER	FAX NUMBER	
	EXPANSION OR TO CHAN RPORT PERMIT REVERSE OF THIS APPLICATION	GE CONDITIONS
Change in Runway length and displacement:		
Please refer to attached sheet for both runway ends and displaced the	hreshold coordinates as survey	red.
CHANGE AIRPORT USE TO: PUBLIC USE SPECIAL U	JSE 🔲 NO CI	ANTICIPATED COMPLETION DATE HANGE
PARTIV. C	ERTIFICATION	
I HEREBY CERTIFY UNDER PENALTY OF PERJURY OWNER'S OR AGENT'S SIGNATURE	TITLE TITLE	THIS APPLICATION,
PRINT NAME	DATE	
SEND COMPLETED APPLICATION AND ALL NECESSARY DOCUMENTS (SEE BAC	CK OF THIS FORM) TO:	

AERONAUTICS PROGRAM - MS #40 P. O. BOX 942874 SACRAMENTO, CA 94274-0001