

# Federal Aviation Administration

# Memorandum

Date: August 10, 2016

To: Clark Desing, Director, Western Service Center



From: Carl Dennhardt, Acting Manager, Seattle Air Route Traffic Control Center

Subject: INFORMATION: Certification Statement Aircraft Accident, LN661TC Arcata, CA, July 29, 2016

I certify that air traffic aircraft accident package, ZSE-ARTCC-0229, has been reviewed and is complete.

Aircraft Accident Package ZSE-ARTCC-0229 LN661TC, PA31 July 29, 2016, 0805 UTC Destroy: January 29, 2019, 0805 UTC SECTION 1. Table of Contents

ZSE-ARTCC-0229 LN661TC

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SECTION 2.

FAA Form 8020-6, Report of Aircraft Accident, and

FAA Form(s) 8020-6-1, Report of Aircraft Accident (Continuation Sheet)

		NT OF TRANS			REPORT DA			REPORT NO.	0000
10	FEDERAL AV	ATION ADM	INSTRATION			August 10, 2016 EPORTING FACILI	TV	ZSE-ARTC	C-0229
	<b>REPORT OF</b> A	AIRCRAH	T ACCI	DENT	NAME OF N		attle ARTCC (ZS	SE)	
1. A	IRCRAFT IDENTIFICATIO	ON AND TYPE	2. DATE/TIME			3. LOCATION	OF ACCIDENT ( CA; 6.6 miles eas		ka Airport,
	LN661TC, PA3	1	July	29, 2016; 0805	5 UTC		ONGITUDE (OP	TIONAL)	
4.11	ATURE OF ACCIDENT						N41 01 37.0000 5. TYPE OF FL	W124 00 36.000	00
9. 19	AT ORE OF ACCIDENT	Low a	ltitude inflight b	reakup			5.1112.0112	IFR Flight Plan	
-		28.0.0			DRESS				
	NAME	POS	ITION		ND STATE)	UNINJURED	INJURED	FATALITY	UNKNOWN
FLIGHT CREW	Larry Mills	Р	ilot	Unknown	n, Unknown			x	
πс									
IDIT						1. F			
6. 1									
						861			
7. P	ASSENGER DATA	NUMBER		NUMBER		NUMBER		NUMBER	
		ABOARD AIRCRAFT	3	UNINJUREE	0	INJURED	0	FATALITIES	3
8. A	IRCRAFT DAMAGE	1			PROPERTY D	DAMAGE		4	
Des	troyed			N	one				
10.	OPERATING STATUS OF	NAVIGATIONA	LAIDS/LIGHTS/	COMMUNICA	TIONS				
Nor									
	REPORT JUST PRIOR	TO ACCIDENT							
II. WEATHER DATA	KACV METAR - 0753 three, dew point one two	UTC: automated		ero at five knots	, visibility four	statute miles, mist,	ceiling two hund	red overcast, tem	perature one
HE	FIRST REPORT SUBSI	FOUENT TO ACC	IDENT						
VEA'	KACV SPECI - 0807 U	TC: automated,	wind one eight z						
Ξ	thousand five hundred f	feet to six thousar	id feet, mist, ceil	ing two hundred	i overcast, temp	perature one three, d	ew point one two	o, altimeter two ni	ine eight five
					1			1	CHECK IF
ED	N	AME		FACILITY		OPERATING	POSITION	F	EYEWITNESS
ATO PERSONNEL INVOLVED	Amanda Sizemore *(AM	v1)		ZSE ARTCC		R30	R		
N.					_				
INEL				Sector Volume	-				
SO									
DEF						<u>.</u>			
					_		(m		
12	*OPERATING INITIAL	LS							
13.	SIGNATURE	ALL LAND							
Carl	Dennhardt Form 8020-6 (12-14) Supersedes			Classical					
FAA	Form 8020-6 (12-14) Supersedes	PTEVIOUS Edition		Electronic Versi	an				

#### FAA Form 8020-6, Report of Aircraft Accident

ZSE-ARTCC-0229 LN661TC



#### DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION REPORT OF AIRCRAFT ACCIDENT (Continuation Sheet)

REPORT DATE			REPORT NO.
Anonat	22	2016	ZSE-ARTCC-0229
August	<u>ک</u> ک,	2010	LOB-ARICC-UZZ9
NAME OF REPORTING	5 FACILITY		
		_	
	Cost	-רקע סן+-	TCC (ZSE)
	Dear	LUIU ANI	

14. CHRONOLOGICAL SUMMARY OF FLIGHT

July 29, 2016

ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME UNLESS OTHERWISE SPECIFIED

- 0741 LN661TC checked on R30 frequency requesting IFR clearance to ZOAK. The R30 controller gave the pilot a squawk code.
- 0742 The R30 controller radar identified LN661TC one mile from KCEC.
- 0743 The R30 controller verifies the altitude of LN661TC and clears them to Oakland Airport as filed and assigns an altitude of one five thousand. LN661TC correctly reads back the clearance, passing through five thousand two hundred for one five thousand.
- 0758 LN661TC, now level at one five thousand feet, advises the R30 Controller that he needs to return to KCEC because they are smelling smoke in the cockpit. The R30 controller issues a clearance direct KCEC and gives a pilot discretion descent to nine thousand feet and asks to be advised if the pilot needs anything else. LN661TC advises that he may lose power but will try to keep the controller updated as long as he can. The R30 controller asks for fuel remaining and people on board.
- 0759 LN661TC declares an emergency with smoke in the cockpit and states that they are depressurizing. The pilot advises that they are heading back to KCEC and asks the controller to call the fire department. The controller again asks how many people on board and the pilot responds that there are three people on board.
- 0801 The R30 controller observes the aircraft track diverting toward KACV and asks the pilot if he would like to try and land at KACV. There is no response from the pilot.
- 0802 The R30 controller advises the pilot that she is not receiving any transmissions and again asks if the pilot would like to try and land at KACV. There is no response from the pilot.
- 0805 OMIC calls 911 and asks for Humbolt County 911 contact. The 911 dispatcher gives him phone numbers for CEC airport and tells him she cannot connect to California 911 Centers, only Washington 911 Centers
- 0809 OMIC calls CEC Airport and gets main office recording. No one is there.
- 0815 R30 controller uses the D Area phone to call the Coast Guard to find contact information for ACV Airport. The controller asks if the Coast Guard, being located right next to the airport could go look to see if LN661TC landed there.
- 0818 OMIC calls Humbolt County Airport and gets no answer. Then calls Humbolt County Sheriff. He gives the details of the situation and asks for the Sheriff to go see if LN661TC is on the ground at ACV.
- 0822 The R30 controller asks the pilot of N47CA if they are in the same company as

2

#### DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION REPORT OF AIRCRAFT ACCIDENT (Continuation Sheet)

REPORT DATE			REPORT NO.
August	23,	2016	ZSE-ARTCC-0229
NAME OF REPORTING	FACILITY	/	
	Seat	ttle ARI	TCC (ZSE)

14. CHRONOLOGICAL SUMMARY OF FLIGHT

LN661TC. The pilot of N47CA responds in the affirmative. The R30 controller asks if the pilot has a phone number for anyone that might be able to determine if LN661TC had landed safely at KACV.

- 0823 N47CA gives the R30 controller a number of their dispatch to try.
- 0824 R30 uses the D Area phone to call CAL/OR Life Flight to see if they had heard from their pilot. They hadn't. She gave him the number to ZSE OMIC to call back if they heard anything.
- 0827 The R30 controller asks N47CA if they would be able to fly over the KACV airport to see if they can see anything. The pilot of N47CA agrees to do so and is cleared over the KACV area and then to KCEC.
- 0828 N47CA advises the R30 controller that the weather at KACV is two and a half and two hundred overcast. The pilot asks if the R30 controller still wants him to fly over KACV. The R30 controller says that if he thinks he may see a hole in the clouds where he may be able to see something, then yes.
- 0829 The pilot of N47CA inquired whether the R30 controller was able to reach anyone at the number he provided. The controller responded that yes, however their company had not heard from LN661TC.
- 0830 Humbolt County Sheriff calls OMIC to tell them the Sheriff has been dispatched to go look for the aircraft at ACV.
- 0838 OMIC calls CAL/OR Life Flight to see if they had heard anything from their pilot. They say they've tried all three cell numbers for those on board without success. They have a pilot that lives 10 minutes from ACV who is driving over to ACV to see if they can find the aircraft on the airport.
- 0841 Humbolt County Sheriff calls to say the aircraft was not located at ACV and they are going to go check Eureka Murray Airport nearby.
- 0844 OMIC calls the ROC to ask about filing and INREQ or ALNOT
- 0900 An INREQ is filed.
- 0906 Humbolt County Sheriff calls to say aircraft not located at Eureka Murray Airport.
- 0910 An ALNOT is filed.
- 0914 OMIC receives call from Airports Rescue Coordination Center regarding the ALNOT. OMIC gives all pertinent data.
- 0920 Flight Serivce Center calls OMIC to give more information about name of pilot and number of passengers, color of aircraft, time filed enroute

0924 The ROC calls OMIC regarding the ALNOT and verifies details

	DEPARTMENT OF TRANSPORTATION	REPORT DATE		REPORT NO.
0	FEDERAL AVIATION ADMINISTRATION	August 2	3, 2016	ZSE-ARTCC-0229
•	REPORT OF AIRCRAFT ACCIDENT (Continuation Sheet)	NAME OF REPORTING FAC	eattle ART	FCC (ZSE)
14. CHRO	NOLOGICAL SUMMARY OF FLIGHT	I		
0925	OMIC receives a call from the DEN t their playback	to share last l	known positi	on and time using
1700	The crash site was located and comm	nunicated with	ZSE	
	No Mc	ore Follows		

SECTION 3. Review of Services Memo(s)



# Federal Aviation Administration

# Memorandum

Date: August 10, 2016 To: Seattle Accident File ZSE-ARTCC-0229 Carl Dennhardt, Acting Manager, Seattle Air Route Traffic Control From: Center Subject: INFORMATION: Review of Services Memo Aircraft Accident, LN661TC Arcata, CA, July 29, 2016

ZSE ARTCC conducted a review of services concerning LN661TC and was determined to have pertinent services. As the holding facility with pertinent services I certify the following data has been retained in accordance with FAA Order 8020.16. Additionally, I certify that the following originals/digital copies are on file in this office.

FAA Form 7230-4
FAA Form 7230-10
FAA Form 8020-6
FAA Form 8020-6-1
FAA Form 8020-9
Personnel Log(s)
Certified Original Copy(ies) of Voice Recording(s)
Facility Layout Chart(s)
National Track Analysis Program (NTAP)
Data Analysis Reduction Tool (DART)
Transcription(s) of Voice Recording(s)
Flight Progress Strip(s)
National Track Analysis Report
Playback Workstation File
Mandatory Occurrence Report

SECTION 4. FAA Form(s) 7230-4, Daily Record of Facility Operation

	DAILY REC	ORD OF FAC		TION	Page 1 of 1 DATE Jul 29, 2016
OCATION		IDENTIFICATION	TYPE FACILITY	OPERATING POSITION	
2	Auburn, WA	ZSE	ARTCC	OMIC	AIR TRAFFIC MANAGER
UTC TIME			REMAR	२кऽ	
0700	GD ON. DARREN	GALL GD			90000 91110
0736	RADAR PERFORMAN	CE CHECKS (	COMPLETE	GD	
0809	ADS-B PERFORMAN	CE CHECKS (	COMPLETE.	WCLC GD	
0859	INREQ 290859 Is	sued for L1	1661TC GD		
0910	ALNOT 290910 Is	sued for L1	N661TC GD		
0945	ZSE-M-2016/07/2	9-0001 1	LN661TC G	D	
1230	PQ ON. VADEN MI	CHELSEN	PQ		
1248	RY ON. RANDY V	INCENT	RY		
1346	WCLC RY				
1425	ZSE-M-2016/07/2	9-0002 1	1944Y/PEN180	RY	
1749	ALNOT 291749 CA	NCELLED FOR	R LN661TC.	A/C LOCATED	RY
1839	ZSE-M-2016/07/2	9-0003 I	DAL436 RY		
2200	GG ON. LEE KRAM	ER GG			
0002	TFR 6/5315 SOUT GG	HG TAMARACI	C FIRE MLP08	8021 3NM SFC-090	0 406-829-7070 124.4
0010	DALR CHECKS COM	PLETE.WCLC	GG		
0430	PQ ON. VADEN MI	CHELSEN	PQ		
0659	COB PQ				
	1				
	1				
that all scheo accomplishe	that entries above are correct, fuled operations have been d except as noted, and that all currences and conditions have	SIGNATURES(S) O	F WATCH SUPERVISOR(S)	$\sim$	
abnormal oci been recorde			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	_	

ZSE-M-2016/07/29-0001

1. Reporting I	AC ID	) 2. Da	ate UT	C (dd	/mm/	уууу)				3. Tir	ne UTC	;		4. Significant Occ	urrence?
z s	E	2	9	0	7	2	0	1	6	0	8	0	5		
O Controller	r provid	ding se	ervices	,		000	Airc	raft C		•		)	1	<b>O</b> Electronically	Detected
5. MOR reported by (select one):     O FLM     O Internal Facility Review															
	z       S       E       2       9       0       7       2       0       1       6       0       8       0       5       Yes       No         5. MOR reported by (select one): O Controller providing services O CIC       O Internal Facility Referral       O Internal Facility Review       Electronically Detected       O Internal Facility Review         CIC       O Aircraft Owner/Operator       O Internal Facility Review       Electronically Detected       O Other (Describe in summary)         Brasher warning given?       Yes       No       Training in progress?       Yes       No         H1 MOR type - in-flight emergency conditions involving (select one):       O Other (describe in summary)       VFR in/on top IFR conditions         Medical emergency       Inflight equipment malfunction       O Pliot Disorientation       V VFR in/on top IFR conditions         Micraft ID       Aircraft type/suffix       IFR/VFR:       Facility communicating       Position communicating       Frequency         LN661TC       PAY2       IFR       VFR       Yes       No       O       Yes       No         Only complete for mechanical MORs       IfC. Passenger or crew condition:       M1d. Medical assistance aboard:       O Yes       No       No         Only complete for mechanical MORs       Only complete for														
O Medical e O Fuel quar	emerge ntity	ency			nfligh	t equi		-	•	n Ć	Pilot I			•	op IFR conditions
H1a. Aircraft information:         Aircraft ID       Aircraft type/suffix         LN661TC       PAY2				IFF	● IFR with A/C				with A/C				R30	124.85	
component: Smoke In	Cockp	pit		1							nditior	:			es lo
H2. MOR type	_	-		-		ns inv	olvin	g (se	-					O Bomb th	nreat
H2b. Nearest	major	city:				H2c.	Altitu	ude:					infor		Diverted to
	<u> </u>			dial		H2f. (UTC		DEN	notifi	ed		(CEC	;	KOAK	CEC

### ZSE-M-2016/07/29-0001

SUMMARY
J1. Summary – provide a brief summary for all MORs in this section that will provide enough information for QA to understand what occurred. Include information about items that require additional information in the specific MOR you are reporting.
Within 10 minutes after takeoff A/C reported smoke in the cockpit and requested clearance back to CEC with emergency vehicles standing by. Clearance was issued, but it appeared that the aircraft was proceeding to ACV. No further communication was established. Radio and radar was lost at app. 0805Z at app. 15,000ft.

ZSE-M-2016/07/29-0001

	SEPARA	TION	
Was this a loss of separation	on?		
O Yes O No	Applicable Separation Rule:		
Separation Used: O Course Divergence	O MARSA O Mode C Interlace	O Opposite Course (Repo	ort Passing) <b>O</b> Other Facility
O Procedure/Waiver	O Report/Observe Leaving Altitude	<b>O</b> Terminal Transition	<b>O</b> Tower Visual Separation
<b>O</b> VFR Aircraft	<b>O</b> Visual Approach	<b>O</b> Visual Separation	O Other
	RISK ANA	LYSIS	
Was this a Risk Analysis Ev	vent?		
O Yes O No	RAE Score:		
	PILOT DEV	IATION	
Was this a possible pilot de	eviation?		
O Yes O No	Preliminary Number:		
	SURFACE	EVENT	
Was this a possible Surface	e Event?		
O Yes O No	Classification:		
	VEHICLE/PEDESTR	IAN DEVIATION	
Was this a possible Vehicle	e/Pedestrian Deviation?		
O Yes O No	Preliminary Number:		
	NMA	C	
Was this a NMAC?	I		
O Yes O No	NMAC Number:		

### ZSE-M-2016/07/29-0001

QA SUMMARY

Reviewed MOR Summary emergency event due to smoke in the cockpit. BNiederer

SECTION 5. Personnel Log(s)



# Federal Aviation Administration

# Memorandum

 Date:
 August 10, 2016

 To:
 Aircraft Accident File ZSE-ARTCC-0229

 From:
 Carl Dennhardt, Acting Manager, Seattle Air Route Traffic Control Center

 Subject:
 INFORMATION: Absent Personnel, Area-D

The following personnel were not on duty July 29, 2016

Jesse Barracoso Kimberly Butler James Eastham Dane Geiger Mark Haechler Christina Phorimavong Tyler Shore Garrett Wilkerson Jackson Yang

# ART - Sign On Log

8/10/2016 3:45:50 PM

### ZSE

### Selected Report Dates: 7/26/2016 10:00:00 PM - 7/27/2016 10:00:00 PM

OPINIT	NAME	SHIFT/TYPE	SIGN- IN	SIGN - OUT	LV	OJT	CIC	TOS
ІН	HIGGS, JUSTIN (JH) J. REMARKS	22:40-06:40/R	22:40:00	06:40:00				
зк	KRIST, BARRETT (BK) A REMARKS	22:40-06:40/R	22:40:00	06:40:00				
(R	ROSS, PAUL (KR) K REMARKS	05:30-13:30/R	05:30:00	13:30:00				
W	WARFEL, CARL (ZW) J REMARKS	05:30-13:30/R	05:30:00	13:30:00		4+13		
к	SCHENK, CHRISTOPHER (CK L. <b>REMARKS</b>	05:35-13:35/R	05:35:00	10:35:00	3+0			
0	JOHNSEN, DUANE (JO) E REMARKS	06:00-14:00/R	06:00:00	14:00:00	8+0			
С	CRUZ, JASON (KC) A REMARKS	06:30-14:30/R	06:30:00	14:30:00				
iL.	LEWIS, BRETT (BL) M. REMARKS	06:30-14:30/R	06:30:00	14:30:00				
S	SPENCER, DENISE (ES) N REMARKS	06:30-14:30/R	06:30:00	14:30:00				
w	WARFEL, APRILANNE (AW) M REMARKS	06:30-14:30/R	06:30:00	14:30:00		2+34		
Z	MYERS, DEREK (MZ) E REMARKS	06:45-14:45/R	06:45:00	14:45:00		2+53		
x	COURTOIS, KORRI (KX) Y. REMARKS	06:57-14:57/R	06:57:00	14:57:00				
0	Kohler, William (Ko) P <b>Remarks</b>	07:00-15:00/R	07:00:00	15:00:00	8+0			
к	KEITH, KENNETH (KK) K REMARKS	07:30-15:30/R	07:30:00	15:30:00			1+39	

Page 1 of 3

### ZSE

OPINIT	NAME	SHIFT/TYPE	SIGN- IN	SIGN - OUT	LV	OJT	CIC	TOS
HB	POTTS, DANIEL (HB) H. REMARKS	07:43-15:43/R	07:43:00	15:43:00				
нх	PARKER, THERESA	07:50-15:50/R	07:50:00	15:50:00				
	(HX) L. REMARKS							
MJ	MORGAN, JAMES (MJ) T	08:00-16:00/R	08:00:00	16:00:00	8+0			
	REMARKS							
AL	PASSERO, ALAN (AL) J	09:00-19:00/R	09:10:00	19:00:00	0+10	3+58	1+4	
	REMARKS							
AM	SIZEMORE, AMANDA (AM)	11:35-19:35/R	11:35:00	15:35:00	4+0	0+57		
	REMARKS							
СН	HADZICK, CHRISTOPHER (CH W. REMARKS	12:30-20:30/R	12:30:00	20:30:00			2+42	
ИК	BADEN, MARK (MK) V REMARKS	13:00-23:00/R	13:00:00	23:00:00	10+0			
90	GOODFELLOW, GEOFFREY (GO) D. REMARKS	13:20-21:20/R	13:20:00	21:20:00				
c	HEWITT, CHRISTOPHER (CC REMARKS	13:20-21:20/R	13:20:00	21:20:00			0+48	
Ľ	LAUSH, TREVOR (TL)	13:20-21:20/R	13:20:00	21:20:00				
	W. REMARKS							
x	STEWART, DREW (TX)	13:20-21:20/R	13:20:00	21:20:00				
	REMARKS							
S	SPENCER, DENISE (ES)	14:30-15:30/O	14:30:00	15:30:00				1+0
	N REMARKS							
P	DIPPE, MATTHEW (DP)	14:30-22:30/R	14:30:00	22:30:00		3+1		
	R							
т	TRANTINA, STEVE (ST)	15:30-23:30/R	15:30:00	23:30:00				
	M. REMARKS							
ĸ	ZAUTNER, JARED (ZK)	15:30-23:30/R	15:30:00	23:30:00				
	D. REMARKS							
IG	MCMAHON, ANGELA	15:45-23:45/R	15:45:00	23:45:00				

#### Selected Report Dates: 7/26/2016 10:00:00 PM - 7/27/2016 10:00:00 PM

### ZSE

OPINIT	NAME	SHIFT/TYPE	SIGN- IN	SIGN - OUT	LV	OJT	CIC	TOS
	(NG)							
	REMARKS							
B	KIM, WONBAE (KB)	16:00-24:00/R	16:00:00	00:00:00	8+0			
	REMARKS							

Selected Report Dates: 7/26/2016 10:00:00 PM - 7/27/2016 10:00:00 PM

SECTION 6.

FAA Form(s) 7230-10, Position Log, or automated equivalent

÷.

		POSITIC	ON LOG		
	ZSE R30		Log Date Pos Type		2016
TIME	TIME Initials TIME Code	Code	Where C	ombined To:	
ON	milais	OFF	Code	Pos ID	Pos Type
0700	JH	0720	C		
0721	AM	0957	С		
0958	JH	1230	С		
1231	NG	1332	С		
1333	$\mathtt{TL}$	1457	С		
1458	ST	1507	С		
1508	CC	1602	С		
1603	TX	1719	С		
1720	CH	1742	С		
1743	YJ	1846	С		
1847	ZK	1942	С		
1943	CH	2012	С		
2013	TX	2033	С		
2034	HA	2039	С		
2040	MK	2135	С		
2136	ST	2149	С		
2150	GR	2244	С		
2245	KD	2335	С		
2336	GL	0030	С		
2336	VP	0030	Т		

		POSITIC	N LOG			
	ZSE R30	Log Date: 7/29/2016 Pos Type: R				
TIME	Initials	TIME	Code	Where C	ombined To:	
ON	millais	OFF	Code	Pos ID	Pos Type	
0031	MK	0121	С			
0122	HA	0153	С			
0154	GL	0236	С			
0154	VP	0236	Т			
0237	KK	0356	С			
0357	ТА	0425	С			
0426	KC	0533	С			
0534	TA	0605	С			
0606	NG	0635	С			
0636	CC	0659	C			
		1				
	7230-10 (Ele					

Fac ID:ZSELog Date:7/29/2010Pos ID:D30Pos Type:RA						
TIME	Initials	TIME	Code	Where Co	ombined To:	
ON	miliais	OFF	Code	Pos ID	Pos Type	
0700		1818		R30	R	
1819	ΤX	1825	С			
1826		2308		R30	R	
2309	HA	2311	С			
2312		0659		R30	R	

		POSITIC	N LOG		
Fac ID: ZSE Log Date: 7/29/2010 Pos ID: R10 Pos Type: R					
TIME	Initials	TIME	Code	Where Co	ombined To:
ON	milliais	OFF	Code	Pos ID	Pos Type
0700		1604		R30	R
1605	MK	1740	С		
1741	CC	1828	С		
1829		0659		R30	R

ZSE D10	Log Date: 7/29/2016 Pos Type: RA				
Initiala	TIME	Codo	Where C	ombined To:	
Initials	OFF	Code	Pos ID	Pos Type	
	1628		R10	R	
HB	1828	Т			
ST	1828	С			
	2308		R10	R	
	2311		D30	RA	
	0659		R10	R	
	Initials HB	ZSE D10 Initials TIME OFF 1628 HB 1828 ST 1828 ST 1828 2308 2311	D10 Pos Type Initials TIME OFF Code 1628 HB 1828 T ST 1828 C 2308 2311	ZSE D10         Log Date: Pos Type:         7/29/ RA           Initials         TIME OFF         Code         Where Composition Pos ID           1628         R10         R10           HB         1828         T           ST         1828         C           2308         R10           D30	

		POSITIC	N LOG		
	ZSE R13		Log Date: Pos Type:		2016
TIME	TIME Initials TIME Code	Code	Where Co	ombined To:	
ON	milliais	OFF	Code	Pos ID	Pos Type
0700		1232		R30	R
1233	CC	1424	С		5
1425	DP	1429	С		
1430	DP	1432	С		
1433	ZK	1604	С		
1605	TL	1702	С		
1703	ES	1815	С		
1816	TX	1818	С		
1819	ES	1824	С		
1825	CH	1829	С		
1830	CC	1834	C		
1835	MK	1940	С		
1941	YJ	2017	C		
2018	ST	2037	С		
2038	ZK	2117	С		
2118	RR	2200	S		
2201	HA	2218	С		
2219	MZ	2311	С		
2312	HA	0022	С		
0023	MZ	0119	С		

		POSITIC	IN LUG		
	ZSE R13		Log Date: 7/29/2016 Pos Type: R		
TIME	Initials	TIME	Code	Where Co	ombined To:
ON	miliais	OFF	Code	Pos ID	Pos Type
0120	KD	0320	С		
0321	XD	0504	C		
0505	TA	0530	C		
0531		0628		R14	R
0629		0659		R30	R

Fac ID:ZSELog Date:7/29/2016Pos ID:D13Pos Type:RA							
TIME	Initials	TIME	Code	Where Co	ombined To:		
ON	muais	OFF	Code	Pos ID	Pos Type		
0700		1433		R13	R		
1434	DP	1553	С				
1434	GO	1553	Т				
1554	TL	1604	С				
1605		1642		R13	R		
1643	DP	1804	С				
1643	GO	1804	Т				
1805		1903		R13	R		
1904	DP	2016	С				
1904	GO	2016	Т				
2017		2105		R13	R		
2106	DP	2135	С				
2106	GO	2135	Т				
2136	HA	2200	С				
2201		0120		R13	R		
0121	XD	0235	С				
0236		0310		R13	R		
0311	VP	0510	С				
0511		0659		R13	R		

		POSITIC	N LOG						
Fac ID:ZSELog Date:7/29/2016Pos ID:R14Pos Type:R							1 40 10		2016
TIME	IME Initials TIME Code	Code	Where Co	ombined To:					
ON	millais	OFF	Code	Pos ID	Pos Type				
0700		1233		R30	R				
1234	ES	1343	С						
1344	ΤX	1458	С						
1459	YJ	1648	С						
1649	CC	1657	С						
1658	ZK	1750	С						
1751	TL	1915	С						
1916	CC	1945	С						
1946	HX	2110	С						
2111	YJ	2155	С						
2156	KD	2202	С						
2203	XD	2231	С						
2232	KK	2317	С						
2318	XD	0028	С						
0029	KC	0155	С						
0156	HA	0220	С						
0221	TA	0312	С						
0313	HA	0420	С						
0421	KK	0549	С						
0550	CC	0628	С						

POSITION LOG							
	ZSE R14	Log Date: 7/29/2016 Pos Type: R					
TIME	Initials	TIME	Code	Where Co	ombined To:		
ON	muais	OFF	Code	Pos ID	Pos Type		
0629		0659		R30	R		
	1 7230-10 (Ele						

SE 014	Log Date: 7/29/2016 Pos Type: RA				
Initials	TIME	Code	Where Co	ombined To:	
miliais	OFF	Code	Pos ID	Pos Type	
	1511		R14	R	
PQ	1528	S			
	1914		R14	R	
CC	1915	С			
	1924		R14	R	
GR	2016	С			
HB	2016	Т			
	2028		R14	R	
GR	2118	С			
HB	2118	Т			
KD	2155	С			
	0659		R14	R	
	Initials PQ CC GR HB GR HB	Initials         TIME OFF           1511           PQ         1528           1914         1914           CC         1915           1924         1924           GR         2016           HB         2016           GR         2118           HB         2155	Initials         TIME OFF         Code           1511         1511           PQ         1528         S           1914         1914           CC         1915         C           1924         C         1924           GR         2016         C           HB         2016         T           GR         2118         C           HB         2118         T           KD         2155         C	Initials         TIME OFF         Code Code         Where Cole Pos ID           1511         R14           PQ         1528         S           1914         R14           CC         1915         C           1914         R14           CC         1915         C           1924         R14           GR         2016         C           HB         2016         T           GR         2118         C           HB         2118         T           KD         2155         C	

Fac ID:ZSELog Date:7/29/2016Pos ID:R15Pos Type:R					
TIME	Initials	TIME	Code	Where Co	ombined To:
ON	millais	OFF	Code	Pos ID	Pos Type
0700		1232		R30	R
1233	í	1859		R14	R
1900	GR	1921	С		
1922	CH	1940	С		
1941		2234		R14	R
2235	ТА	2335	С		
2336	GR	0029	С		
0030	TA	0123	С		
0124		0218		R14	R
0219	MZ	0251	С		
0252	KC	0339	С		
0340	GL	0500	С		
0501		0628		R14	R
0629		0659		R30	R

POSITION LOG						
	ZSE D15	Log Date: 7/29/2016 Pos Type: RA				
TIME	Initials	TIME OFF	Code	Where Combined To:		
ON				Pos ID	Pos Type	
0700		1511		R15	R	
1512		1528		D14	RA	
1529		1940		R15	R	
1941		2016		D14	RA	
2017		2028		R15	R	
2029		2155		D14	RA	
2156		0659		R15	R	
b						
				1		

		POSITIC	N LOG		
Fac ID: ZSE Pos ID: R36		Log Date: 7/29/2016 Pos Type: R			
TIME ON	Initiale	TIME	Code	Where Combined To:	
		OFF		Pos ID	Pos Type
0700		1429		R30	R
1430	HX	1549	Т		
1430	NG	1549	С		
1550	ST	1617	С		
1618		1645		R30	R
1646	HX	1730	Т		
1646	NG	1730	С		
1731		1825		R30	R
1826	TX	1919	С		
1920	ST	1926	С		
1927	ES	2011	С		
2012	TL	2025	С		
2026	KD	2048	С		
2049	MZ	2133	С		
2134	GL	2237	С		
2134	VP	2237	Т		
2238	KC	2336	С		
2337	KD	0022	С		
0023	KK	0127	С		
0128		0659		R30	R

POSITION LOG						
FacID: ZSE PosID: D36			Log Date: 7/29/2016 Pos Type: RA			
TIME	Initials	TIME OFF	Code	Where Combined To:		
ON				Pos ID	Pos Type	
0700		1455		R36	R	
1456	HB	1558	С			
1559		1818		R36	R	
1819		1825		D30	RA	
1826		0659		R36	R	
	7230-10 (Ek					

POSITION LOG						
FacID: ZSE PosID: SD1		Log Date: 7/29/2016 Pos Type: O				
TIME ON	Initials	TIME OFF	Code	Where Combined To:		
				Pos ID	Pos Type	
0700		1254		A14	A	
1255	PQ	1429	S			
1430		1907		A14	A	
1908	СС	1912	С			
1913		2013		A14	A	
2014	CH	2028	С			
2029	ES	2029	С			
2030	ES	2217	С			
2218	RR	0052	S			
0053		0659		A14	A	

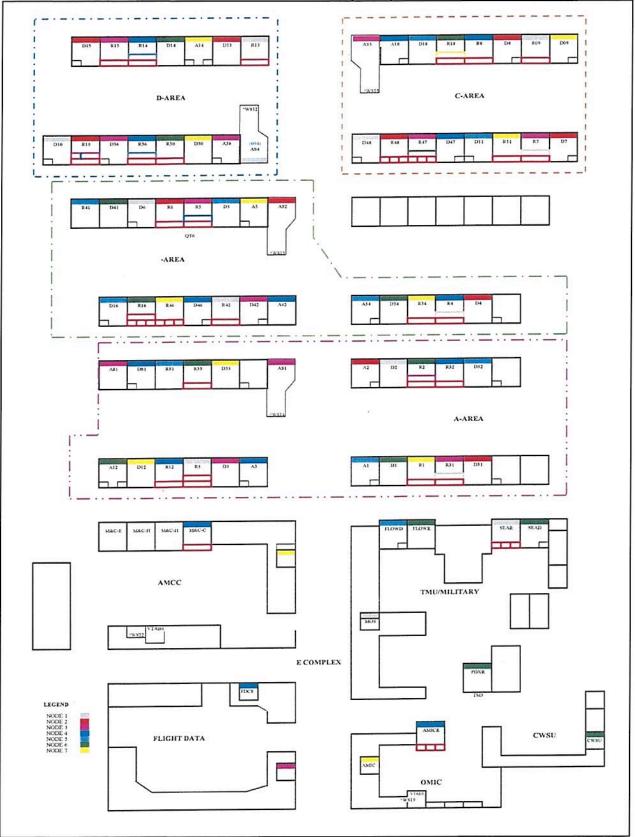
	ZSE SD2		Log Date Pos Type		2016		
TIME	Initials	TIME	Code	Where Combined To:			
ON	millais	OFF	Code	Pos ID	Pos Type		
0700		1429		SD1	0		
1430	ES	1605	С				
1606	CC	1647	С				
1648	PQ	1743	S				
1744	CH	1823	С				
1824	PQ	2029	S				
2030		2237		SD1	0		
2238	MK	0030					
0031		0042		R02	R		
0043	GR	0128	С				
0129	KK	0151	С				
0152	GR	0306	С				
0307	MZ	0359	С				
0400	KK	0420					
0421		0659		R02	R		

	2016	Where Combined To:	Pos Type	-71								
	7/29/2016 0	Where Co	Pos ID	Closed								
N LOG	Log Date: Pos Type:	Code	2000									
POSITION LOG		TIME	TIME	OFF	0659							
	ZSE SD3	Initiale	CIBNIII									
	Fac ID: Pos ID:	TIME	NO	0700								

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SECTION 7. Facility Layout Chart(s)



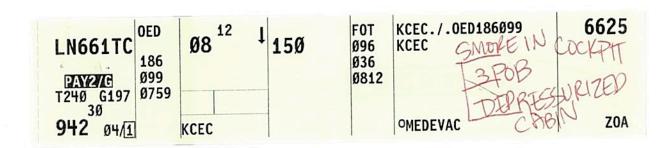
## Seattle ARTCC Facility Layout Chart

SECTION 8.

Flight Progress Strip(s) and/or In-Flight Contact Record(s)

Seattle ARTCC July 29, 2016 UTC

Flight Progress Strip



SECTION 9. Transcription of Voice Recording(s)



Federal Aviation Administration

## Memorandum

Date: August 23, 2016

To: Aircraft Accident File ZSE-ARTCC-0229

From: Seattle Air Route Traffic Control Center

Subject: **INFORMATION**: Partial Transcript Aircraft Accident, LN661TC Arcata, CA, July 29, 2016

This transcription covers the Seattle Air Route Traffic Control Center (ARTCC) R30 R position for the time period from July 29, 2016, 0711 UTC, to July 29, 2016, 0900 UTC.

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Agencies Making Transmissions	Abbreviations
LN661TC	LN661TC
R30	R30
N47CA	N47CA

I certify that the following is a true transcription of the recorded conversations pertaining to the subject Aircraft Accident involving LN661TC.

Carla R. Vance Staff Support Specialist Seattle ARTCC 0711 (0712 - 0740)0741 0741:38 LN661TC medevac six six one tango charlie with you off crescent city looking for i f r to oakland 0741:45 R30 medevac six six one tango charlie seattle center good evening squawk six six two five 0741:52 LN661TC six six two five for six six one tango charlie 0742 0742:50 R30 medevac six six one tango charl charlie radar contact a mile west of the crescent city v o r say altitude

ZSE-ARTCC-0229 LN661TC Page 2 of 5 0742:56 LN661TC that checks six thousand four hundred in the climb six six one tango charlie 0743 0743:01 R30 two six four thousand four hundred 0743:11 R30 medevac one tango charlie ah cleared to the cre the oakland airport as filed climb and maintain one five thousand and ah crescent city altimeter two niner eight eight can you say again altitude leaving 0743:23 LN661TC okay ah two niner eight eight cleared to ah oakland as filed ah climb and maintain one five thousand and we're just passing through five thousand two hundred in the climb for six six one tango charlie 0743:38 R30 cheyenne one tango i'm sorry medevac one tango charlie roger that checks out now thanks 0744 (0745 - 0757)0758 0758:13 LN661TC and seattle center cheyenne six six one tango charlie we're going to turn back to crescent city we're got ah we're smelling smoke in the cockpit 0758:25 R30 cheyenne six six one tango charlie roger cleared direct crescent city or cleared to crescent city via direct and descend at pilot's discretion maintain niner thousand and ah i'll ah if you need anything else let me know 0758:42 LN661TC okay looks like we're going to lose some power here shortly so i'll try and keep you posted as long as i can six six one tango charlie 0758:53 R30 cheyenne six six one tango charlie roger the crescent city altimeter two niner eight eight and ah if you could give me fuel remaining and people on board um and ah anything else you need 0759 0759:07 LN661TC yeah we've got smoke in the cockpit declaring an emergency we're depressurizing and ah heading back to crescent city call the fire department please 0759:24 R30 cheyenne one tango charlie wilco how many people on board

ZSE-ARTCC-0229 LN661TC

Page 3 of 5 LN661TC three on board 0759:28 0759:29 R30 roger 0800 0801 0801:54 R30 cheyenne one tango charlie would you like to try and land at arcata 0802 0802:21 R30 cheyenne six six one tango charlie i'm not getting ah any transmissions from you would you like to go to arcata instead of ah crescent city i see you turning around 0803 (0804 - 0820)0821 0821:28 N47CA good morning seattle center cheyenne four seven charlie alphas level one six thousand 0821:33 R30 cheyenne four seven charlie alpha seattle center the arcata altimeter two niner eight five 0821:41 N47CA eight five (unintelligble) we've got the weather out at crescent city we'd like to proceed direct huvex (unintelligble) two approach 0821:49 R30 cheyenne four seven charlie alpha i'm sorry that was broken say again the ah fix per ah request 0821:56 N47CA ah huvex hotel uniform victor echo xray 0822:02 R30 cheyenne four seven charlie alpha roger i'll have that for you shortly ah actually i have ah a request for you when you're ready 0822:13 R30 cheyenne seven charlie alpha are you ah in the same company as the ah tango charlie six six one tango charlie 0822:20 N47CA that's affirmative 0822:21 R30 do you have any phone numbers for anyone that would answer

a phone at this time i had the med six six one tango charlie have an emergency he was trying to go back to

ZSE-ARTCC- LN661TC	0229	
Page 4 of	5	
		crescent city but i think he landed at arcata and i can't get ahold of anyone
0822:53	N47CA	yeah you can try ah one eight hundred seven zero five one seven two eight
0823:02	N47CA	okay and that's is that like your ops
0823:05	N47CA	yes it's ah ah flight guard ah i don't want to call em our dispatch but ah that's who sends us on our way ah they'll know who to call and how to get ahold of somebody
0823:20 0824 (0825-0826) 0827	R30	cheyenne seven charlie alpha roger
0827:16	R30	cheyenne seven charlie alpha would you be able to ah fly over the arcata airport on your way into ah ah huvex and um just tell me if you see anything
0827:28	N47CA	yeah we can do that
0827:30	R30	cheyenne seven charlie alpha cleared direct arcata direct huvex direct crescent city and ah descend at pilot's (unintelligible) ah correction i'll have lower for you shortly
0827:39 0828	N47CA	(unintelligible) direct huvex four seven charlie alpha
0828:21	N47CA	and seattle four seven charlie alpha
0828:23	R30	go ahead
0828:24	N47CA	ya the weather at arcata is two and a half two hundred overcast
0828:32	R30	cheyenne seven charlie alpha roger ah thank you for that ah descend at pilot's discretion maintain eight thousand

ZSE-ARTCC-0 LN661TC	229	
Page 5 of 5		
0828:41	N47CA	pilot's discretion to eight thousand seven charlie alpha do you still want me to go to arcata and do that
0828:48	R30	cheyenne seven charlie alpha if if you think you see maybe a breakout towards the coast that you could get lower just let me know um right now we're kinda just looking for anything
0829		
0829:34	N47CA	did you get ahold of anybody on the eight hundred number
0829:38	R30	i i got ahold of your company and they hadn't heard from him yet and ah we're still working on it i haven't heard anything yet
0829:47 0830 (0831-0859) 0900	N47CA	thanks

End of Transcript

SECTION 10. Weather Products

Seattle ARTCC July 29, 2016 UTC

METAR KACV 290753Z AUTO 16005KT 4SM BR OVC002 13/12 A2986 RMK AO2 SLP115 T01280122 401830122

SPECI KACV 290807Z AUTO 18004KT 2 1/2SM R32/4500VP6000FT BR OVC002 13/12 A2985 RMK AO2 VIS 2V4 T01280122

I certify that this is a true copy of the original which was available to the controller.

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Carla R. Vance Support Specialist Seattle ARTCC

SECTION 11. Other

UTC	(Z
OIC	( 4

(Zulu) Time Conversion Chart

UTC (Zulu)	PST/ ALDT	PDT/ MST	MDT/ CST	CDT/ EST	EDT/ AST	ALST	HST
0000* 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000	1600 1700 1800 2000 2100 2200 2300 0000* 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200	1700 1800 1900 2000 2100 2200 2300 0000* 0100 0200 0300 0400 0500 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300	1800 1900 2000 2100 2200 2300 0000* 0100 0200 0300 0400 0500 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400	1900 2000 2100 2200 2300 0000* 0100 0200 0300 0400 0500 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500	2000 2100 2200 2300 0000* 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600	1500 1600 1700 1800 2000 2100 2200 2300 0000* 0100 0300 0400 0500 0600 0700 0800 0900 1000 1100	1400 1500 1600 1700 1800 2000 2100 2200 2300 0000* 0100 0300 0400 0500 0600 0700 0800 0900 1000
2100 2200 2300 2400	1300 1400 1500 1600	1400 1500 1600 1700	1500 1600 1700 1800	1600 1700 1800 1900	1700 1800 1900 2000	1200 1300 1400 1500	1100 1200 1300 1400

The time \*0000 and 2400 are interchangeable. The time 2400 is associated with the date of the day ending, and 0000 with the day just starting.

> UTC = Coordinated Universal Time, or Zulu **PST** = Pacific Standard Time (UTC - 8 hours) ALDT = Alaskan Daylight Time (UTC - 8 hours) **PDT** = Pacific Daylight Time (UTC - 7 hours) MST = Mountain Standard Time (UTC - 7 hours) **MDT** = Mountain Daylight Time (UTC - 6 hours) **CST** = Central Standard Time (UTC - 6 hours) **CDT** = Central Daylight Time (UTC - 5 hours) EST = Eastern Standard Time (UTC - 5 hours) EDT = Eastern Daylight Time (UTC - 4 hours) AST = Atlantic Standard Time (UTC - 4 hours) ALST = Alaskan Standard Time (UTC - 9 hours) HST = Hawaiian Standard Time (UTC - 10 hours)

ZSE-ARTCC-0229

LN661TC

