

**NATIONAL TRANSPORTATION SAFETY BOARD
Office of Research and Engineering
Vehicle Recorder Division
Washington, D.C. 20594**



GROUP CHAIRMAN'S FACTUAL REPORT OF INVESTIGATION

CEN14FA099

**By
Bill Tuccio, Ph.D.**

WARNING

The reader of this report is cautioned that the transcription of a cockpit voice recorder audio recording is not a precise science but is the best product possible from a Safety Board group investigative effort. The transcript or parts thereof, if taken out of context, could be misleading. The transcript should be viewed as an accident investigation tool to be used in conjunction with other evidence gathered during the investigation. Conclusions or interpretations should not be made using the transcript as the sole source of information.

The English translations contained in this report are not word for word; rather, they are idiomatic and intended to express the meaning and context of the Spanish source language.

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division
Washington, D.C. 20594

July 2, 2014

Cockpit Voice Recorder - 12

Group Chairman's Factual Report
By Bill Tuccio, Ph.D.

A. EVENT

Location: Aspen, Colorado
Date: January 5, 2014
Aircraft: Bombardier CL-600-2B16, N115WF
Operator: Vineland Corporation Company
NTSB Number: CEN14FA099

B. GROUP

A group was convened on January 28, 2014.

Chairman: Dr. Bill Tuccio
Aerospace Engineer
National Transportation Safety Board

Member: Courtney Liedler
Air Safety Investigator
National Transportation Safety Board

Member: Carlos Rivera
Management and Program Analyst
Federal Aviation Administration

Member: Captain Franco Pietracupa
Chief Customer Liaison Pilot
Bombardier

C. SUMMARY

On January 5, 2014, at 1222 mountain standard time (MST), a Bombardier CL-600-2B16, N115WF, impacted the runway while attempting to land on Runway 15 at Aspen-Pitkin County Airport/Sardy Field (KASE), Aspen, Colorado. There were two crewmembers and a passenger onboard. One crewmember was fatally injured; the other crewmember and passenger received serious injuries. The airplane was destroyed. The airplane was registered to the Bank of Utah Trustee and operated by

Vineland Corporation Company, Panama, South America under the provisions of 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed for the flight, which operated on an instrument flight rules flight plan. The flight originated from Tucson International Airport (KTUS), Tucson, Arizona, at 1004. A tape cockpit voice recorder (CVR) was sent to the National Transportation Safety Board's Audio Laboratory for readout. The CVR group prepared a transcript of the entire 30 minute recording.

D. DETAILS OF INVESTIGATION

The NTSB Vehicle Recorder Division's Audio Laboratory received the following CVR:

Recorder Manufacturer/Model: **Fairchild A-100A**
Recorder Serial Number: **61480**

Recorder Description

Per federal regulation 14 CFR 91.609(e), aircraft manufactured prior to April 7, 2010, must be equipped with a CVR that records a minimum of the last 30 minutes of aircraft operation; this is accomplished by recording over the oldest audio data. When the CVR is deactivated or removed from the airplane, it retains only the most recent 30 minutes of CVR operation. This model CVR, the Fairchild A-100A, records 30 minutes of analog audio on a continuous loop tape in a four-channel format: one channel for each flight crew and one channel for the cockpit area microphone (CAM).

Recorder Damage

Upon arrival at the audio laboratory, it was evident that the CVR had not sustained any heat or structural damage and the audio information was extracted from the recorder normally, without difficulty.

Audio Recording Description

The 29 minute and 44 second recording consisted of four channels of useable audio information. Each channel's audio quality* is indicated in Table 1.

Table 1: Audio Quality

Channel Number	Content/Source	Quality
1	Pilot-in-Command (PIC)	Good
2	Unknown	Unusable
3	CAM	Poor
4	Second-in-Command (SIC)	Good

Timing and Correlation

Timing on the transcript was established by correlating the CVR events to common events on the flight data recorder (FDR) and air traffic control (ATC). Specifically, radio

* See attached CVR Quality Rating Scale.

transmissions that the aircraft made at 1471.4, 1481.2, 1530.7, 1610.6, 1615, 1633.6, 1660.6, and 1690.9 CVR Elapsed Time were correlated to the radio transmit microphone key parameter from the FDR for the same radio transmissions at 446452.15625, 446462.15625, 446511.15625, 446591.15625, 446596.15625, 446614.15625, 446641.15625, and 446672.15625 FDR subframe reference number (SRN). Each of the radio transmissions acted as an anchor point for a linear interpolation between the CVR and FDR events. This interpolation resulted in the following relationship: 1691.8 CVR Elapsed Time = 446672.15625000 FDR SRN.

Once a correlation between the two recorders was established, a reference to local time was determined based on aligning a radio transmission recorded on the CVR with the same radio transmission on the ATC transcript[†]. Specifically, the transmission made by aircraft N115WF at 19:20:45 UTC on the ATC transcript was aligned with the same transmission recorded at 1690.9 CVR Elapsed Time on the CVR. Furthermore, 7 hours was subtracted from UTC to convert to MST.

Combining these relationships, the following equation was developed: CVR MST = CVR Elapsed Time + 11:52:34.1.

Description of Audio Events

The recording began at 11:52:34 MDT as the aircraft began receiving radar vectors for the Localizer DME-E approach at KASE. Most intracockpit communications were in Spanish. The attached transcript uses a plain font to display words as spoken. When translation was necessary, the English translation was *italicized* and shown in square brackets below the verbatim transcription. The translation from Spanish to English was not word-for-word; rather, it was idiomatic and considered the context and meaning of the Spanish source language.

As part of the Safety Board's accident investigation process, the PIC was invited to review the CVR transcript and suggest corrections or additions. The PIC declined the invitation.

[†] See the Air Traffic Control Factual Report for the ATC transcript in the public docket.

CVR Quality Rating Scale

The levels of recording quality are characterized by the following traits of the cockpit voice recorder information:

- Excellent Quality** Virtually all of the crew conversations could be accurately and easily understood. The transcript that was developed may indicate only one or two words that were not intelligible. Any loss in the transcript is usually attributed to simultaneous cockpit/radio transmissions that obscure each other.
- Good Quality** Most of the crew conversations could be accurately and easily understood. The transcript that was developed may indicate several words or phrases that were not intelligible. Any loss in the transcript can be attributed to minor technical deficiencies or momentary dropouts in the recording system or to a large number of simultaneous cockpit/radio transmissions that obscure each other.
- Fair Quality** The majority of the crew conversations were intelligible. The transcript that was developed may indicate passages where conversations were unintelligible or fragmented. This type of recording is usually caused by cockpit noise that obscures portions of the voice signals or by a minor electrical or mechanical failure of the CVR system that distorts or obscures the audio information.
- Poor Quality** Extraordinary means had to be used to make some of the crew conversations intelligible. The transcript that was developed may indicate fragmented phrases and conversations and may indicate extensive passages where conversations were missing or unintelligible. This type of recording is usually caused by a combination of a high cockpit noise level with a low voice signal (poor signal-to-noise ratio) or by a mechanical or electrical failure of the CVR system that severely distorts or obscures the audio information.
- Unusable** Crew conversations may be discerned, but neither ordinary nor extraordinary means made it possible to develop a meaningful transcript of the conversations. This type of recording is usually caused by an almost total mechanical or electrical failure of the CVR system.

Transcript of a Fairchild A-100A tape cockpit voice recorder, serial number 61480, installed on a Vineland Corporation Company CL-600-2B16 (N115WF), which crashed during landing at Aspen-Pitkin County Airport/Sardy Field, Aspen, Colorado.

LEGEND

CAM	Cockpit area microphone voice or sound source
HOT	Flight crew audio panel voice or sound source
RDO	Radio transmissions from N115WF
APR	Radio transmission from the Aspen approach controller
TWR	Radio transmission from the Aspen airport tower controller
AC-VAL	Radio transmission from aircraft call sign ending in Victor Alpha Lima
AC-5BC	Radio transmission from aircraft call sign ending in Five Bravo Charlie
AC-7HB	Radio transmission from aircraft call sign ending in Seven Hotel Bravo
AC-VAL	Radio transmission from aircraft call sign ending in Victor Alpha Lima
ATIS	Automatic Terminal Information Service
EGPWS	Enhanced Ground Proximity Warning System
-1	Voice identified as the PIC
-2	Voice identified as the SIC
-3	Voice identified as the person in the jumpseat
-?	Voice unidentified
*	Unintelligible word
#	Expletive
@	Non-pertinent word
()	Questionable insertion
[]	Editorial insertion or, <i>when in italics, translation to English</i>

Note 1: Times are expressed in mountain standard time (MST).

Note 2: Generally, only radio transmissions to and from the accident aircraft were transcribed.

Note 3: Words shown with excess vowels, letters, or drawn out syllables are a phonetic representation of the words as spoken.

Note 4: A non-pertinent word, where noted, refers to a word not directly related to the operation, control or condition of the aircraft.

Note 5: Translations to English are shown in italicized text and as an editorial insertion.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

11:52:34.1 MST
START OF RECORDING
START OF TRANSCRIPT

11:53:10.6
HOT-1

a ver si ahora sí, dile.
[let's see this time, tell him.]

11:53:13.0
HOT-1

ya no me mientas, no juegues con mis sentimientos.
[don't lie to me, don't play with my feelings.]

11:53:16.7
HOT-3

te va a mandar directo a AJAXX.
[he's going to send you directly to AJAXX.]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:52:51.8

AC-VAL heading zero three zero Victor Alpha Lima.

11:52:54.4

APR November Five Bravo Charlie turn right heading three six zero.

11:52:57.5

AC-5BC right turn three six zero Five Bravo Charlie.

11:53:03.4

APR November Five Whiskey Foxtrot turn left heading two seven zero.

11:53:06.4

RDO-2 two seven zero on the heading Whiskey Fox.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:53:20.5
HOT-1

okay.

11:53:22.0
HOT-3

oye ya a RED TABLE, pues ya.
[hey now at RED TABLE, well now.]

11:53:23.5
HOT-2

sí ya arregló.
[yes it got fixed.]

11:53:24.8
HOT-1

@.

11:53:28.1
HOT-3

oscuro * información falsa.
*[dark * false information.]*

11:53:30.3
HOT-2

check.

11:53:44.0
HOT-3

no, pues es fácil. Delta Bravo Lima se pone y directo.
[no, but it's easy. You put in Delta Bravo Lima direct.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:53:27.3
APR

November Five Bravo Charlie turn left heading three three zero.

11:53:30.4
AC-5BC

left turn three three zero Five Bravo Charlie.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:53:47.1
HOT-2

ajá.
[ah ha.]

11:53:47.4
HOT-1

ujum.
[mm hmm.]

11:53:47.5
HOT-3

okay.

11:53:55.9
HOT-1

tú, ya sabemos AJAXX o...unas tantitas millas, unas seis--
[you, we already know AJAXX or...a few miles, about six--]

11:54:02.8
HOT-3

AJAXX está a diecinueve de ASPEN.
[AJAXX is nineteen from ASPEN.]

11:54:05.6
HOT-2

ajá.
[ah ha.]

11:54:05.8
HOT-1

ajá. nosotros de AJAXX estamos a siete punto nueve. si nos
fuera a meter este buey.
*[ah ha. we are seven point nine from AJAXX. if this dummy
would put us in.]*

11:54:07.0
HOT-3

a siete punto nueve.
[at seven point nine.]

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:54:10.4
HOT-2

oye nos está metiendo por el sector de trece cién.
[hey, he's putting us in through the thirteen one hundred sector.]

11:54:10.5
HOT-1

ya deberíamos estarnos ensuciando, eh?
[we should have been getting dirty eh?]

11:54:12.6
HOT-3

* ujum.
[mm hmm.]*

11:54:13.6
HOT-1

yo--
[!-.]

11:54:13.7
HOT-2

oye nos están metiendo por el sector bajo ya.
[hey, he's putting us in the lower sector.]

11:54:15.4
HOT-?

sí.
[yes.]

11:54:16.1
HOT-1

pero deberíamos estar ensuciando el pinche avión buey.
[we should be dirtying up the darn plane dude.]

11:54:18.7
HOT-3

pero ahorita estamos alto. porque estás a veintiuno estas muy alto.
[but right now we are high. because you're at twentyone, you're too high.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:54:19.0
HOT-1

entonces mejor espera que sí. sí.
[yes then it's better to wait. yes.]

11:54:22.3
HOT-2

al menos nos pueden poner de estas aquí arriba (a) quince.
no?
[at least they could have put these up here (at) fifteen. no?]
[approximate translation]

11:54:25.0
HOT-1

no sí arriba de veinte y tres mil pies.
[no yes above twenty three thousand feet.]

11:54:29.2
HOT-3

es mejor que hagas tu aproximación y ya
entonces...(empiezas descent).
[it's better that you make your approach and then (begin descent).]

11:54:30.2
HOT-1

sí no claro.
[yeah right.]

11:54:30.8
HOT-2

sí sí.
[yes. yes.]

11:54:32.2
HOT-?

**.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:54:33.6
HOT-2

oye nos da tiempo papa acuérdate que--
[hey we'll have time (man) remember that--] [stops talking
coincident with ATC transmission to another aircraft]

11:54:34.8
HOT-?

sí.
[yes.]

11:54:45.4
APR

November Five Whiskey Foxtrot descend and maintain flight
level one eight zero.

11:54:48.5
RDO-2

one eight zero Whiskey--one ah Whiskey Fox.

11:54:57.4
HOT-?

(ya nos)--
[(now they're)--]

11:54:58.1
HOT-1

ah no eh vamos a volar con VNAV verdad?
[uh no uh we're going to fly with VNAV right?]

11:55:00.0
HOT-3

flight level. flight level change.

11:55:02.5
HOT-1

no te no tenemos nada. ah no. es que ese nuevo punto no
tenemos nada. ahí. verdad? okay.
*[we don't [stammer] have anything. ah no. that point we don't
have anything. there. right? okay.]*

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:55:07.1
HOT

[sound of static, similar to cell phone interference, for about 25 seconds]

11:55:07.2
HOT

[sound of chime, similar to cell phone alert]

11:55:07.3
HOT-3

era con dos diéz.
[it was with two ten.]

11:55:11.5
HOT-3

tu velocidad...
[your speed....]

11:55:13.2
HOT-1

sí yo la--
[yes I--]

11:55:13.7
HOT-3

...y flight level change ahí bajas a uno ocho mil. ahí va relajadito.
[...then flight level change there you go down to one eight thousand. there it will go relaxed.]

11:55:16.2
HOT-1

ujum.
[mm hmm.]

11:55:18.6
HOT-1

sí.
[yes.]

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

11:55:19.6
HOT

[sound of chime, similar to cell phone alert]

11:55:21.4
HOT-1

* estos # de la #.
[these # of the #.] [chuckling]

11:55:27.5
HOT-2

sí lo apague cabrón no se por que esta--
[I turned it off dude, I do not know why it is--]

11:55:28.3
HOT-1

na' más chekale a ver si no quiere que vayamos a RED
TABLE o alguna #. de esas a este # y--
*[check out if he doesn't want us to go to RED TABLE or some
#. this # and--]*

11:55:33.3
HOT-2

es un whatsapp.
[it's a whatsapp.]
[Whatsapp is an international texting mobile software
application]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:55:19.0
APR

November Five Bravo Charlie turn left heading two seven
zero.

11:55:22.2
AC-5BC

left turn two seven zero Five Bravo Charlie.

11:55:34.7
APR

November Five Whiskey Foxtrot turn left heading one five
zero.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:55:40.5
HOT-1

hay cabrón.~
[oh dude.]

11:55:47.2
HOT-1

ahora va a bajar mas rapidito. eh?
[now it's going to descend a little faster. eh?]

11:55:51.5
HOT-2

por qué no se reporta?
[why doesn't he report?]

11:55:53.0
HOT-3

esta # de tu madre.
[this # mother.]

11:55:57.1
HOT-3

sí...es lo que te digo tu no...no le hagas caso.
[yes...it's what I'm telling you. you don't...don't pay any attention to them.]

11:55:59.2
HOT-?

no mames cabrón.
[no kidding dude.] [whispering]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:55:37.8
RDO-2

one five zero on the heading Whiskey Fox.

11:55:42.4
APR

November Five Bravo Charlie continue left turn to heading two four zero.

11:55:46.3
AC-5BC

we'll continue left two four zero Five Bravo Charlie.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:56:00.5
HOT-2

no mames.
[no kidding.]

11:56:01.3
HOT-2

qué heading era?
[what heading was it?]

11:56:03.3
HOT-3

one five zero.

11:56:08.1
HOT-3

ahora sí te mandó directo ahí.~
[now he sent you directly there.]

11:56:14.3
HOT-2

Localizer DME approach.

11:56:17.1
HOT-1

loc ese es. no es el que traemos. no?
[loc that's it. no the one that we bring. no?]

11:56:22.8
HOT-3

ahora (sigue).
[now it (continues).]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:56:01.8
APR

Dot Com twenty five forty one seven miles from JARGU cross JARGU at or above one three thousand four hundred cleared Localizer DME Echo approach.

11:56:09.9
AC-DC2541

cross (JARGU) (at) thirteen thousand four hundred cleared for the Localizer DME approach **.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:56:26.1
HOT-2 (direct to) AJAXX?

11:56:28.2
HOT [sound of static, similar to cell phone interference]

11:56:28.6
HOT-? jeee.
[yeah.]

11:56:33.2
HOT [sound of c-chord, similar to altitude alert]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:56:26.5
APR November Seven Hotel Bravo descend and maintain one six thousand.

11:56:29.5
AC-7HB one six thousand Seven Hotel Bravo and you copied our divert to RIFLE.

11:56:33.2
APR Seven Hotel Bravo at.

11:56:38.5
APR November Seven Hotel Bravo standby for your clearance to RIFLE maintain one six thousand.

11:56:42.0
AC-7HB one six thousand Seven Hotel Bravo.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:56:53.8
HOT

[sound of static, similar to cell phone interference]

11:56:59.8
HOT-1

próximos...y de.
[the next ...and of.]

11:57:13.5
HOT-3

ya pasamos AJAXX.
[we're passing AJAXX.]

11:57:16.0
HOT-2

ajá.
[ah hah.]

11:57:16.9
HOT-1

no mames no creo que me vaya meter este tipo de su #
madre con esta # altitud buey.
*[(no kidding). I don't think that this guy son of a # is going to
insert us with this # altitude dude.]*

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:56:52.5
APR

Xray Alpha Victor Alpha Lima turn left heading three three zero.

11:56:57.3
AC-VAL

left heading three three zero Victor Alpha Lima.

11:57:04.6
APR

November Five Bravo Charlie turn left heading one eight zero intercept the localizer.

11:57:08.4
AC-5BC

one eight zero to intercept Five Bravo Charlie.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:57:20.7
HOT-3 vele quitándole...ya.
[start taking it off...ya.]

11:57:21.9
HOT-2 sí.
[yes.]

11:57:22.8
HOT-1 [sigh] dos diez nos pidió no?
[[sigh] two ten he asked no?]

11:57:25.2
HOT-3 sí.
[yes.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:57:26.2
RDO-2 one one five Whiskey Fox ah do you want us to intercept the localizer or maintaining this heading?

11:57:30.7
APR November Five Whiskey Foxtrot maintain that heading you'll be number three er number four to the airport three to the airport now.

11:57:37.4
RDO-2 roger.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:57:38.1
HOT-1

no estoy entendiendo no no obviamente dieciocho mil pies
en JARGU está bien pendejo buey no mames no hay
manera.
*[no I'm not understanding no no obviously eighteen thousand
feet on JARGU is real stupid dude don't kid me there's no
way.]*

11:57:43.6
HOT-3

nos va a dar otra vuelta.
[he's going to give us another round.]

11:57:43.6
HOT-2

nos va a dar otra vuelta.
[he's going to give us another round.]

11:57:45.3
HOT-1

sí nos va a dar otra vuelta.
[yes he's going to give us another round.]

11:57:45.7
HOT-3

dos diez.
[two ten.]

11:57:52.7
HOT-2

quieres esa velocidad? oh?
[do you want that speed? oh?]

11:57:54.9
HOT-1

sí.
[yes.]

11:57:54.9
HOT-2

right.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:57:60.0
HOT-3

treinta cero ocho. sus altímetros.
[thirty zero eight. your altimeters.]

11:58:02.4
HOT-2

otra vez? gracias.
[again? thanks.]

11:58:04.0
HOT-3

de nada.
[you're welcome.]

11:58:04.6
APR

November Five Bravo Charlie four miles from AJAXX proceed direct AJAXX cross AJAXX at one six thousand. cleared Localizer DME Echo approach.

11:58:05.7
HOT-3

suave por que se sube *.
*[softly because it will go up *.]*

11:58:09.0
HOT-1

sí.
[yes.]

11:58:09.5
HOT-?

[laughter]

11:58:10.4
HOT-1

exacto (se va buscado).
[exactly. (it goes searched for).]

11:58:12.1
HOT-?

[laughter]

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:58:14.2
HOT-2 message.

11:58:16.9
HOT-1 JARGU...es que estamos pasando JARGU buey.
[JARGU...it's that we're passing JARGU dude.]

11:58:28.3
HOT-1 **.

11:58:30.5
HOT-2 ciento veinte el heading.
[one twenty the heading.]

11:58:32.1
HOT-3 es que igual y te van a dar una vuelta.
[it's the same and they'll give you another round.]

11:58:33.4
HOT-2 sí. nos van a dar otra vuelta más.
[yes. they're going to give us another turn.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:58:12.9
AC-5BC okay direct AJAXX. at ah AJAXX at one six sixteen thousand cleared for the Localizer DME approach. Five Bravo Charlie.

11:58:20.3
APR November Five Whiskey Foxtrot fly heading one two zero.

11:58:24.6
RDO-2 one two zero on the heading November one one Five Whiskey Fox.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:58:34.8
HOT-1

si pero me cambiaron la voz era (un buey).
[yes but they changed the voice it was (a dude).]

11:58:36.9
HOT-2

sí. ya.
[yes. done.]

11:58:38.7
HOT-3

es pa' que no te quejes.
[it's so you don't complain.]

11:58:41.3
HOT-1

ahí va un pincho avión hacinedo la aproximación.~
[there goes a darn plane making his approach.]

11:58:43.2
HOT-3

andale.
[go.]

11:58:45.9
HOT-1

y va a cuatro. cabrón...
[and he goes at four. dude.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:58:37.4
APR

November Seven Bravo Hotel turn left heading two seven zero.

11:58:41.4
AC-7HB

is that for Seven Hotel Bravo left turn two seventy?

11:58:44.2
APR

November Seven Hotel Bravo affirmative. and reset transponder squawk five one five seven.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

11:58:48.3
HOT-1

...ey. lo como lo debe ser.
[ey. how it should be.]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

11:58:49.8

AC-7HB five one five seven Seven Hotel Bravo.

11:58:57.1

APR November Five Bravo Charlie proceed direct JARGU now and cross JARGU at or above one three thousand four hundred.

11:59:03.8

AC-5BC okay direct JARGU Five Bravo Charlie.

11:59:06.4

APR November Five Whiskey Foxtrot turn left heading zero niner zero.

11:59:09.9

RDO-2 zero nine zero on the heading November One One Five Whiskey Fox.

11:59:13.5

APR November Seven Hotel Bravo cleared to RIFLE airport via radar vectors maintain one six thousand.

11:59:18.8

AC-7HB okay cleared to RIFLE radar vectors one six thousand. Seven Hotel Bravo.

11:59:21.8

APR November Five Bravo Charlie contact tower maintain one seven zero knots till five mile final.

TIME and SOURCE

INTRA-COCKPIT CONTENT

11:59:39.7
HOT-1

dile al aire gracias por la derecha eh? por que veo que ya otro # se está yendo a RIFLE. cabrón. entonces quien sabe que pinche pedo hay abajo.
[say on the air thanks for the right to be able eh? because I see that another # is going to RIFLE. dude. then who knows what darn fart is down there.]

11:59:48.8
HOT-2

seguimos debido al aire. quéjense ya. la altitud son diez mil docientos por la derecha el trecientos. heading ya está puesto.
[we continue on due to the air. complain now. the altitude is ten thousand two hundred to the right and the three hundred heading is put in.]

12:00:09.4
HOT-2

qué? se borro?
[what? it erased?]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

11:59:28.1
AC-5BC

okay goin' to tower one seventy on the speed until five mile final Five Bravo Charlie.

11:59:58.9
APR

November Seven Hotel Bravo turn left heading two one zero.

12:00:03.2
AC-7HB

left turn two one zero Seven Hotel Bravo.

12:00:07.6
APR

November Seven Hotel Bravo amend instructions proceed direct ZELOP.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

12:00:10.4
HOT-3

sí. pues es como ya lo pasamos.
[yes. since we passed it.]

12:00:13.2
HOT-2

ajá.
[ah ha.]

12:00:13.8
HOT-3

lo voy a volver a ponerlo...al tenerlos.
[I'm going to put it in...when you have them.]

12:00:22.3
HOT-1

a poco se borran cabrón.
[with little they get erased dude.]

12:00:24.3
HOT-3

lo que pasa es que ya los habías pasado. pero...eh.
*[what's happening is that you had already passed them.
but...eh.]*

12:00:31.9
HOT-2

#. no mames.
[#. don't annoy me.]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:00:11.7
AC-7HB

direct ZELOP Seven Hotel Bravo.

12:00:13.3
APR

and November Seven Hotel Bravo verify you have the RIFLE weather.

12:00:16.5
AC-7HB

Hotel Bravo affirmative.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

12:00:34.4
HOT-2

eso no debió borrarse. no?
[that shouldn't have erased. no?]

12:00:37.5
HOT-1

sí. no. eso...
[yes. no. that's...]

12:00:38.8
HOT-2

te los dicto?
[do I call them out to you?]

12:00:39.6
HOT-1

...es nuevo ese pedo.
[...that fart is new.]

12:00:49.0
HOT-3

pues ** a (RIFLE).
*[well ** to (RIFLE).]*

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:00:35.4
APR

November Seven Hotel Bravo one five miles from ZELOP
cross ZELOP at one six thousand cleared ILS runway two six
approach RIFLE airport.

12:00:45.2
AC-7HB

okay. uh we're direct ZELOP. maintain one six thousand until
ZELOP. and we're cleared for the ILS approach at uh RIFLE
Seven Hotel Bravo.

12:00:54.8
APR

November Five Whiskey Foxtrot turn left heading three two
zero.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:01:00.3
HOT-3 ** AJAXX.

12:01:07.0
HOT-2 te los dicto?... AJAXX JARGU.
 [do I call them out to you?... AJAXX JARGU.]

12:01:13.5
HOT-3 * JARGU [murmuring].

12:01:20.5
HOT-3 no. es JARGU.
 [no. it's JARGU.]

12:01:23.0
HOT-2 es JARGU.
 [it's JARGU.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:00:58.5
RDO-2 three two zero November one one Five Whiskey Fox.

12:01:02.7
APR Xray Alpha Victor Alpha Lima fly heading three one zero.
 descend and maintain one six thousand.

12:01:08.8
AC-VAL three one zero one six thousand. Victor Alpha Lima.

12:01:22.1
APR November Five Whiskey Foxtrot descend and maintain one
 seven thousand. Aspen altimeter three zero zero eight.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:01:24.5
HOT-3

sí.
[yes.]

12:01:39.4
HOT-2

one...perdón. esto.
[one. sorry. uhh.]

12:01:46.3
HOT-1

entonces...flight level change.
[then...flight level change.]

12:01:49.7
HOT-2

okay JARGU y luego sigue KICER Kilo India *--
*[okay JARGU and next is KICER Kilo India *--]*

12:01:51.4
HOT-?

okay.

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:01:29.2
RDO-1

can you say altitude again please for ahh Whiskey Fox.

12:01:32.4
APR

November Five Whiskey Foxtrot descend and maintain one six thousand. Aspen altimeter three zero zero eight.

12:01:41.5
RDO-2

[stammer] okay. three zero zero eight and one six thousand on the altitude.

12:01:52.6
APR

Xray Alpha Victor Alpha Lima turn left heading two four zero.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:01:56.8
HOT-2

okay...next sigue KICER.
[okay...next is KICER.]

12:01:60.0
HOT-3

voy.
[doing it.]

12:02:01.2
HOT-2

ah...okay.

12:02:03.9
HOT-3

como se llama...KICER. [low volume]
[how do you call it...KICER. [low volume]]

12:02:07.6
HOT-2

KICER...okay. Luego FIMSO.
[KICER...okay. Next is FIMSO.]

12:02:12.6
HOT-1

Luego...JARGU.
[Later...JARGU.]

12:02:14.9
HOT-2

FIMSO. okay?

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:01:56.8

AC-VAL left heading two four zero Victor Alpha Lima.

12:02:12.1

AC-7HB and for Seven Hotel Bravo was that one six thousand to ZELOP?

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:02:17.2
HOT-2

AJAXX AJAXX.

12:02:18.3
HOT-3

okay (ya listo).
[okay (it's done).]

12:02:19.2
HOT-3

si. y yo pongo el *. ya lo he puesto *
*[yes. and I'll put the *. I already put it *.]*

12:02:21.2
HOT-2

gracias.
[thanks.]

12:02:35.5
HOT-2

okay.

12:02:35.9
HOT-1

ya lo puse RED TABLE. AJAXX. JARGU. para que no nos quite...este.
[I put it RED TABLE. AJAXX. JARGU. so he doesn't take us...this.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:02:15.8
APR

November Seven Hotel Bravo affirmative one six thousand. I can try to get you lower in a minute. (just ah) you're above Eagle's airspace right now.

12:02:22.3
AC-7HB

okay. thanks. we appreciate that.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:02:40.8
HOT-2

exactamente.
[exactly.]

12:02:43.2
HOT-1

nada.
[nothing.]

12:02:44.8
HOT

[sound of c-chord, similar to altitude alert]

12:02:45.7
HOT-1

(JARGU) trece cuatro.
[(JARGU) thirteen four.]

12:02:48.4
HOT-2

es mas no lo debieras de quitar cabrón no?
[in fact, shouldn't you take it off dude no?]

12:02:50.0
HOT-3

es que no lo--
[it's that you should not--]

12:02:50.3
HOT-2

no lo debieras borrar?
[shouldn't you erase it?]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:02:52.2

APR Xray Alpha Victor Alpha Lima fly heading two one zero.

12:02:55.7

AC-VAL two one zero Victor Alpha Lima.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:02:58.7
HOT-2

quieres ponerlo (deshielo)?
[do you want to put (anti-ice)?]

12:03:00.3
HOT-?

*.
[.]*

12:03:02.2
HOT-3

son..sí. ponlas.
[they're...yes. put them.]

12:03:03.2
CAM

[sound of clicks]

12:03:06.2
HOT-?

esta esta. [low volume]
[this one this one. [low volume]]

12:03:06.9
HOT-?

uh huh. [low volume]

12:03:10.8
HOT-1

próximos dieciseis.
[next sixteen thousand.]

12:03:12.1
HOT-2

okay. approaching one six thousand.

12:03:23.5
HOT

[sound of two snaps]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:03:24.7
HOT-2

cabrón.
[dude.]

12:03:29.8
HOT-2

menos velocidad. menos velocidad. menos velocidad.
[less speed. less speed. less speed.]

12:03:56.3
HOT-2

ahí vamos otra vez hacia AJAXX...
[we're going again towards AJAXX...]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:03:25.6
APR

Xray Alpha Victor Alpha Lima descend and maintain one three thousand four hundred fly heading three four zero.

12:03:32.0
AC-VAL

fly heading ah three four zero Victor Alpha Lima.

12:03:37.4
APR

and Xray Alpha Victor Alpha Lima descend and maintain one three thousand four hundred.

12:03:42.3
AC-VAL

one three thousand four hundred and ah can you give me the ah the heading.

12:03:46.9
APR

Xray Alpha Victor Alpha Lima fly heading two four zero.

12:03:51.1
AC-VAL

two four zero Victor Alpha Lima.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:03:58.4
HOT-2

lo que pasa es aquí que el chiste es no mandarlo directo a ningún lado. cabrón. si no hasta el final.
[what's happening is that the joke is not sending him direct to no place. dude. unless until the end.]

12:04:00.7
HOT-3

así es.
[that's how it is.]

12:04:02.4
HOT-2

pa' que no lo borre. #.
[so you don't erase it. #.]

12:04:04.6
HOT-2

sí. verdad?
[yes. right?]

12:04:05.8
HOT-1

aquí ya...ya voy...ya.
[here now...I'm going. done.]

12:04:07.1
HOT-2

no mi pregunta...mi pregunta sí?
[no my question...my question yes?]

12:04:09.0
HOT-3

probablemente.
[probably.]

12:04:21.2
HOT-2

te gusta la velocidad? dos diez?
[do you like the speed? two ten?]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:04:31.2
HOT-1

pusimos los deshielos si verdad?
[did we put the anti-ice. yes. right?]

12:04:32.7
HOT-2

sí.
[yes.]

12:04:32.9
CAM-3

sí.
[yes.]

12:04:33.6
HOT-1

okay.

12:04:34.6
HOT-3

más vale.
[you better have.]

12:04:35.3
HOT-1

no claro.
[no. it's clear.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:04:39.0
APR

Xray Alpha Victor Alpha Lima four miles from JARGU turn left heading one eight zero cross JARGU at one three thousand four hundred. cleared Localizer DME Echo approach.

12:04:48.4
AC-VAL

turn left heading one eight zero three thousand ah thirteen thousand four hundred JARGU and cleared for the ah localizer...runway one five.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:05:06.5
HOT-?

***.

12:05:08.3
HOT-2

sí.
[yes.]

12:05:10.4
HOT-1

como ah once millas no? de *.
[like ah eleven miles no? from *.]

12:05:20.2
HOT-1

no mames *.
[don't kid me *.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:05:16.5
APR

November Five Whiskey Foxtrot turn left heading two four zero.

12:05:20.0
RDO-2

two four zero on the heading November one one Five Whiskey Fox.

12:05:23.3
APR

November Seven Hotel Bravo cross ZELOP at or above one three thousand. report IFR cancellation with Denver Center on one three four point five. change to advisory frequency approved. goodday.

12:05:34.4
AC-7HB

okay switching to advisories and ah cross ZELOP at ahhh or above one three thousand Hotel Bravo. actually we've got the airport in sight we'll cancel IFR right now with you.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:05:40.9
HOT-1

ya estamos ah?
[we're there ah?]

12:05:42.6
HOT-2

sí...ahí esta. mira.
[yes...there it is. look.]

12:06:06.2
HOT

[sound of 2 c-chords, similar to 2 altitude alerts]

12:06:16.9
HOT-1

blah blah same difference.

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:05:42.7
APR

November Seven Hotel Bravo IFR cancellation received squawk VFR. frequency changed approved. goodday.

12:05:47.4
AC-7HB

thank you. goodday.

12:06:05.0
APR

Xray Alpha Victor Alpha Lima contact tower.

12:06:08.4
AC-VAL

tower eighteen ah eighty five Victor Alpha Lima. thank you.

12:06:12.0
APR

November Five Whiskey Foxtrot verify you have information Romeo.

12:06:16.1
RDO-2

ah we have the ah Romeo on board.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

12:06:27.2
HOT-1

okay.

12:06:28.4
HOT-1

entonces vertical no es ahora si VNAV verdad?
[then it's not vertical now it's VNAV right?]

12:06:31.7
HOT-3

no ahorita.
[not now.]

12:06:32.3
HOT-1

ya...tenemos al...bueno.
[well...we have al...good.]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:06:19.2
APR

November Five Whiskey Foxtrot thank you. descend and maintain one three thousand four hundred.

12:06:24.1
RDO-2

thirteen thousand four hundred November one one Five Whiskey Fox.

12:06:32.8
ATIS

due to opposite direction traffic expect to pass proximity aircraft near the airport. notices to airmen Alpha seven closed. aerodrome all surfaces work in progress snow removal. all ramps and aprons quarter inch trace snow. taxiway alpha quarter inch trace snow. runway one five three three swept seventy five feet wide. aerodrome all lighting and signages obscured. low level windshear advisories are in effect. IPK LDA unusable beyond twenty five degrees left and right of course.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:06:33.7
HOT-3

sí.
[yes.]

12:06:35.7
HOT-1

ennnnntonces VNAV? tenemos altitudes?
[thennnn VNAV? do we have altitudes?]

12:06:38.5
HOT-3

sí.
[yes.]

12:06:39.5
HOT-1

okay.

12:06:40.0
HOT-3

VNAV.

12:06:44.0
HOT-1

y ya nos están empezando a bajar entonces igual vamos a meterle vamos a meterle flaps twenty. carnal.
[and now they're starting to lower us then we'll put in, put in flaps twenty. Bro.]

12:06:51.0
HOT-2

sí. speed check.
[yes. speed check.]

12:06:53.0
CAM

[sound of click, similar to flap handle]

12:06:58.1
HOT-2

sí. no.
[yes. no.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:07:03.9
HOT-2

si de nuevo es de que hay un alguna alguno cambio cabrón.
[yes again it's that there is some some major change dude.]

12:07:09.1
HOT-3

JARGU es a trece cuatrocientos...okay?
[JARGU is at thirteen four hundred...okay?]

12:07:11.0
HOT-2

cuatrocientos.
[four hundred.]

12:07:12.6
HOT-1

correcto.
[correct.]

12:07:12.7

APR

November Five Whiskey Foxtrot verify descending one three thousand four hundred.

12:07:18.3

RDO-2

yes ah we're ah slowing down the aircraft.

12:07:19.3
HOT-?

yes.

12:07:24.1
HOT-2

vamos pa' bajo es lo que quiere que nos bajemos cabrón.
bajo vámonos vámonos.
*[let's go down. it's what (she) wants to get us down dude.
down let's go let's go.]*

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:07:26.1
HOT-1

si pero porque # no esta bajando.
[yes but why is this # thing not going down.]

12:07:28.1
HOT-3

(put her) in VNAV.

12:07:29.3
HOT-3

ahí esta ya.
[there it is now.]

12:07:30.0
HOT

[sound of 2 c-chords, similar to 2 altitude alerts]

12:07:31.6
HOT-3

okay ahí vas.
[okay there you go.]

12:07:33.5
HOT-1

ahí va.~
[there it goes.]

12:07:35.1
HOT-3

ah okay.

12:07:35.9
HOT-1

y otra vez.
[and again.]

12:07:36.0
HOT-3

(y ve ya llego a) trece cuatrocientos. ahí vas.
[(and see it got to) thirteen four hundred. there it goes.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:07:56.1
HOT-1 y estamos de JARGU...le voy a....
[and we're from JARGU...I'm going to do a...]

12:08:07.7
HOT-? **.

12:08:11.4
HOT-1 okay.

12:08:12.3
HOT-2 si vámonos vámonos.
[yes. let's go let's go.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:07:44.5
APR November Five Whiskey Foxtrot four miles from JARGU turn left heading one eight zero cross JARGU at or above one three thousand four hundred. cleared Localizer DME Echo approach.

12:07:52.8
RDO-2 okay cleared the localizer via DME approach ah one five. one one Five Whiskey Fox.

12:07:59.6
APR November Five Whiskey Foxtrot cross JARGU at one three thousand four hundred or above [emphasis]. cleared Localizer DME Echo [emphasis] approach.

12:08:06.7
RDO-2 roger. one ah Localizer Echo approach and thirteen thousand fourteen hundred or above.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:08:13.4
HOT-1

vamos a ponerle flaps twenty carnal.
[let's put in flaps twenty bro.]

12:08:16.4
HOT-2

ya están. flaps thirty.
[they're there. flaps thirty.]

12:08:17.7
HOT-1

(vívelo).
[(lively).]

12:08:18.8
CAM

[decrease in background sound, similar to power reduction]

12:08:19.7
HOT-1

thirty buey.
[thirty dude.]

12:08:20.3
HOT-2

le ponemos las patitas abajo?
[do we put the little feet down?]

12:08:23.1
HOT-1

será que tan lejos? bueno. si.
[like so far away? well. yes.]

12:08:24.1
HOT-2

no sé.
[I don't know.]

12:08:24.2
HOT-1

venga venga venga.
[come on come on come on.]

<u>TIME and SOURCE</u>	<u>INTRA-COCKPIT CONTENT</u>	<u>TIME and SOURCE</u>	<u>AIR-GROUND COMMUNICATION CONTENT</u>
12:08:25.0 HOT-2	sí. no? <i>[yes. no?]</i>		
12:08:25.4 HOT-1	sí. sí mas vale ey [emphasized]. <i>[yes. yes we better. aye [emphasized].]</i>		
12:08:26.0 HOT-2	ven a vez. <i>[comes at time.]</i>		
12:08:26.6 CAM	[sound of increased background noise, similar to landing gear down]		
12:08:26.9 HOT-1	ya vi el hueco. <i>[I see the hole.]</i>		
12:08:29.1 HOT-1	a ver. vamos a meternos. <i>[let's see. we're going to get in.]</i>		
12:08:32.0 HOT-3	no ya ya ya *. [louder, emphasized] <i>[no. now now now *.]</i>		
12:08:32.6 HOT-2	ya. ya. ya. <i>[yeah. yeah. yeah.]</i>		
12:08:33.2 HOT-1	okay.		

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:08:35.1
HOT-1

sí sí. el el localizador se esta yendo cabrón.
[yes yes. the the localizer is leaving dude.]

12:08:37.8
HOT-3

(es que no le habíamos puesto el approach).
[(it's that we hadn't put the approach).]

12:08:39.5
HOT-1

ajá.
[ah ha.]

12:08:39.9
HOT-3

okay.

12:08:40.7
HOT-2

okay. flaps thirty?

12:08:43.1
HOT-1

flaps thirty.

12:08:44.1
HOT-3

thirty.

12:08:44.8
CAM

[sound of click, similar to flap handle]

12:08:47.4
HOT-2

ahora bájame la velocidad. bajamos la velocidad. así.
[now, slow the speed down for me. lower the speed. like that.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:08:52.5
CAM-3

ahí vas bien.
[there you're going good.]

12:08:53.4
HOT-3

secenta y cinco.
[sixty five.]

12:09:02.3
CAM-3

trecientas mas...eh decent.
[three hundred more...uh decent.]

12:09:07.3
CAM-3

(pasamos) trecientos.
[(we passed) three hundred.]

12:09:08.1
HOT-1

se me hace muy poco @ como ves si lo suelto y me voy bajando cabrón. ya le ya esta esperame glideslope...a ver localizer.
[I believe it's too little @. See if I let it go and make it go down dude. now I'm now wait the glideslope...let's see localizer.]

12:09:17.3
HOT-2

aquí es el localizador y tenemos que estar...
[here's the localizer and we need to be...]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:08:51.2
APR

November Five Whiskey Foxtrot contact tower.

12:08:55.0
RDO-2

ah we'll contact tower one one Five Whiskey Fox.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:09:23.6
HOT-2

y rachas cabrón.
[# and gusts dude.]

12:09:23.9
HOT-1

estamos muy altos. no?
[we're too high. right?]

12:09:25.2
CAM-3

no vas bien. vas bien.
[no you're good. you're good.]

12:09:26.4
HOT-1

sí?
[yes?]

12:09:28.5
HOT-2

por qué no entra aquí cabrón?
[why isn't it going in dude?]

12:09:29.8
HOT-1

DME once no mames estamos siete mil pies altos cabrón.
no, va pa' bajo.
*[eleven DME no kidding we're seven thousand feet high
dude. no, it's going down.]*

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:09:19.0
TWR

Xray Alpha Victor Alpha Lima wind three one zero at one zero
gust two five.

12:09:27.1
AC-VAL

Alpha Lima.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:09:31.6
CAM-3

** ajá.
[** ah ha.]

12:09:32.6
TWR

November Five Whiskey Foxtrot Aspen Tower.

12:09:35.2
HOT-1

no?

12:09:37.0
CAM-3

si estas a diez...
[if you're at ten...]

12:09:40.8
HOT-1

estamos muy altos.
[we're too high.]

12:09:42.2
CAM-3

** para doce novecientos estamos (dos) mil pies arriba
bajemos.
[** to twelve nine hundred we're (two) thousand feet up let's
go down.]

12:09:44.3
HOT-1

ujum.
[mm hmm.]

12:09:45.0
HOT-2

sí. sí. sí.
[yes. yes. yes.]

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:09:46.6
HOT-1

na' más vayan leyéndome las altitudes. no?
[just start reading me the altitudes. no?]

12:09:49.1
HOT-2

dónde está aquí la lectura del DME cabrón?
[where here is the DME reading dude?]

12:09:51.9
HOT-1

aquí la traes en nueve punto ocho.
[here it brings nine point eight.]

12:09:52.1
HOT-2

ese el RED TABLE.
[that's the RED TABLE.]

12:09:53.5
CAM-3

doce trecientos aquí sería doce trecientos.
[twelve three hundred here it should be twelve three hundred.]

12:09:54.6
HOT-2

once cinco.
[eleven five.]

12:09:56.2
HOT-2

por eso.
[because of that.]

12:09:57.7
HOT-2

estamos a diez millas.
[we're at ten miles.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:10:03.9
HOT-1 landing gear down. okay.

12:10:06.2
HOT-3 aquí está once setecientos.
[here it's eleven seven hundred.]

12:10:12.8
HOT-2 pssshhht [similar to mouth exhale noise].

12:10:13.2
HOT-1 pssshhht [similar to mouth exhale noise].

12:10:19.1
CAM-3 (pasamos de) setecientos vas a bajar a ocho millas? de nueve a siete once setecientos.
[(we're passing) seven hundred you're going down to eight miles? from nine to seven eleven seven hundred.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:10:00.3
RDO-2 Aspen Tower November one one Five Whiskey Fox we're ah nine miles out.

12:10:05.3
TWR November one one Five Whiskey Foxtrot Aspen Tower wind two niner zero at one niner one minute average wind three two zero at one two gust two five. runway one five cleared to land.

12:10:15.5
RDO-2 okay (when) ah having the runway cleared to land. and ah roger with the wind.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:10:27.6
HOT-2

ah estamos altísimos.
[ah we're really high.]

12:10:32.5
CAM-?

**.

12:10:42.6
HOT-3

ahí vas...bien. si quítale power esta...quítale quítale.
[there you're going good yes...yes pull power it's...pull it pull it.]

12:10:44.7
HOT-2

sí.
[yes.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:10:20.6
TWR

November one one Five Whiskey Foxtrot ah standby disregard...Xray Alpha Victor Alpha Lima when able turn left join Alpha (taxiway) ground point niner. any windshear?

12:10:30.4
AC-VAL

ah affirmative we had like twenty knots ah windshear Victor Alpha Lima.

12:10:34.1
TWR

gain of twenty?

12:10:35.6
AC-VAL

affirmative. yes.

12:10:38.0
TWR

November one one Five Whiskey Foxtrot Falcon just reported a gain of 20 knots ah use caution for low level windshear.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:10:46.6
HOT-2

sí quítale quítale potencia quítale potencia. no está cabrón hijo.
[yes pull pull the power pull power. no it's really tough son.]

12:10:50.1
HOT-3

ahí estas establecido no te preocupes.
[there it is you're established don't worry.]

12:10:50.3
HOT-2

sí tenemos treinta nudos de cola cabrón.
[yes we have thirty knot tail wind dude.]

12:10:50.4
HOT-1

(eso).
[(that's it).]

12:10:53.6
HOT-3

ajá. más así...mantén ese rate.
[uhum. more like that...maintain that rate.]

12:10:57.5
HOT-2

tienen...tuvieron rachas de veinte de cola. aja.
[they have...they had twenty tailwind gusts. uhum.]

12:10:58.4
CAM-3

ya. ya.
[yeah. yeah.]

12:10:45.7
RDO-2 ah roger.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:11:00.8
HOT-1

ahí vamos. ahí vamos. ahí vamos. ahí vamos.
[there we go. there we go. there we go. there we go.]

12:11:01.0
CAM-3

cinco ocho.
[five eight.]

12:11:02.3
HOT-2

okay cinco ocho.
[okay five eight.]

12:11:03.3
HOT

[sound of c-chord, similar to altitude alert]

12:11:04.1
HOT-3

de aquí ya se bajan hasta diez mil docientos.
[from here now we lower until ten thousand two hundred.]

12:11:05.7
HOT-2

vamos hasta diez docientos. si.
[we go until ten two hundred. yes.]

12:11:07.8
HOT-2

estamos lentísimos.
[we're very slow.]

12:11:08.0
TWR

wind three one zero at one zero.

12:11:11.2
HOT-2

eh ciento treinta de diez el viento. vamos a ver.
[eh one hundred and thirty from ten the wind. let's see.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:11:11.8
HOT-1

estamos a cinco millas. hay buey la pista esta aquí cabrón.
[we're at five miles. whoa dude the runway is right here dude.]

12:11:13.8
HOT-2

ah no.
[oh no.]

12:11:15.0
HOT-3

no.

12:11:15.4
HOT-2

na' olvídale.
[nah forget it.]

12:11:16.3
HOT-1

na' imposible.
[nah impossible.]

12:11:18.1
RDO-2

okay eh missed approach eh November one one Five Whiskey Fox. there is thirty three knots of tailwind.

12:11:18.5
HOT-1

missed approach.

12:11:21.2
HOT-1

go around ** ...es...es...
*[go around **...it's...it's.]*

12:11:23.8
HOT-1

ey.
[eh.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:11:27.6
HOT-?

[sigh]

12:11:28.5
CAM

[sound of increased background noise, similar to increase in engine power]

12:11:30.9
HOT-2

al viraje trecientos.
[at the turn three hundred.]

12:11:32.6
HOT-1

landing gear up.

12:11:34.0
HOT-2

positive. gear up. [voice straining]

12:11:36.8
CAM

[sound of thunks, similar to gear retraction]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:11:26.2
TWR

November one one Five Whiskey Foxtrot execute published missed.

12:11:30.1
RDO-2

okay.

12:11:37.4
TWR

November Five Whiskey Foxtrot climb and maintain one six thousand expedite your climb execute published missed to one six thousand on the altitude.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:11:43.3
HOT-2

cuidado. cuidado.
[careful. careful.]

12:11:44.4
HOT-3

cuidado.
[careful.]

12:11:45.8
RDO-2

we're executing the ah climbing to one six thousand.

12:11:48.7
HOT-3

flaps twenty.

12:11:50.8
HOT-2

thrust set.

12:11:50.8
HOT-1

bah a ver..
[bah let's see...]

12:11:51.7
HOT-3

espera espera...
[wait wait...]

12:11:51.9
HOT-1

...todavía no esta baja la velocidad...
[...still the speed is not slow...]

12:11:54.1
HOT-3

sí.
[yes.]

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:11:54.3
HOT-1

...ta bien. vámonos a catorce mil.
[...it's good. let's go to fourteen thousand.]

12:12:02.3
HOT-1

ahora sí regálame flaps (in).
[now yes gift me flaps (in).]

12:12:05.7
CAM-3

flaps twenty.

12:12:10.9
CAM-3

estamos (lejos) altisimos.
[we're (far) very high.]

12:12:13.1
HOT-2

sí.
[yes.]

12:12:15.7
HOT-2

treientos estas?
[three hundred these?]

12:12:18.9
HOT-2

y treientos.
[and three hundred.]

12:12:19.3
HOT-1

está el localizer?
[is it the localizer?]

12:12:21.7
HOT-2

dónde te lo pongo?
[where do I put it for you?]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:12:23.0
HOT-1

ciento ocho cinco.
[one hundred eight five.]

12:12:28.6
HOT-2

trecientos ir ah ah ah ciento ocho cinco.
[three hundred go to ah ah ah one hundred eight five.]

12:12:31.4
HOT-3

ya.
[done.]

12:12:32.7
HOT-2

ya esta.
[it's done.]

12:12:33.2
HOT-3

** (por favor)?
*[** (por favor)?]*

12:12:35.2
HOT-2

**.

12:12:36.0
HOT-1

okay y ahora tenemos aletas?
[okay and now we have flaps?]

12:12:38.6
TWR

November Five Whiskey Foxtrot contact departure one two three point eight.

12:12:38.9
HOT-2

cero.
[zero.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:12:39.4
CAM

[sound of click, similar to flap handle]

12:12:39.4
CAM

[sound of chime, similar to cabin chime]

12:12:39.7
HOT-3

flaps.

12:12:40.5
HOT-1

okay.

12:12:45.2
HOT-2

[sigh] ja la madre cabrón.
[ha the mother dude.]

12:12:52.9
HOT-3

*.

12:12:53.6
HOT-?

departure * ah * que?
*[departure * ah * what?]*

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:12:46.9
TWR

November one one Five Whiskey Foxtrot contact departure one two three point eight.

12:12:50.7
RDO-2

one thirty three point eight.

12:12:53.5
RDO-2

departure November one one Five Whiskey Fox level at one six...climbing to one six thousand.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:12:57.2
HOT-1

okay.

12:13:04.0
HOT-3

to return back.

12:13:04.8
HOT-1

ajá.
[ah ha.]

12:13:11.0
CAM

[sound of c-chord, similar to altitude alert]

12:13:15.4
CAM

[sound of decreased background noise, similar to power reduction]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:12:59.4
APR

November one one Five Whiskey Foxtrot Aspen Departure roger. say intentions.

12:13:04.1
RDO-2

okay to return back ahhhh and do another approach. we had a tailwind of thirty knot.

12:13:10.5
APR

November Five Whiskey Foxtrot roger. fly heading three one zero vector Localizer DME Echo approach.

12:13:16.5
RDO-2

three one zero and vectors again for the localizer one five right.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:13:20.7
HOT-3

**.

12:13:21.6
RDO-2

one five. I'm sorry.

12:13:23.1
HOT-1

ujum.
[mm hmm.]

12:13:24.9
HOT-1

ahorita se lo ponemos.
[now we'll put it in for him.]

12:13:29.6
HOT-2

okay va de nuevo pinche curso ciento cincuenta y...si pero hay que bajar unos * ahí aun.
*[okay here goes the darn course one hundred fifty and...yes but we have to lower some * there still.]*

12:13:36.8
HOT-1

si muy preciso.
[yes very precise.]

12:13:38.2
HOT-2

ciento cincuenta y uno.
[one hundred and fifty one.]

12:13:38.2
HOT-1

lo voy a bajar con vertical speed y ya después hacemos todo el pinche pedo.
[I'm going to lower it with vertical speed and then later we'll do the whole darn fart.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:13:47.1
HOT-2 ahora si vámonos pa'lla si? vámonos a hechar una #.
[now yes let's go over there yes? let's go and go throw a # over there.]

12:13:47.6
HOT-1 trece mil cuatro cientos.
[thirteen thousand four hundred.]

12:13:47.7
HOT-3 * trece cuatro cientos.
[thirteen four hundred.]*

12:13:50.1
HOT-2 trece cuatro cientos.
[thirteen four hundred.]

12:13:51.0
HOT-1 okay vertical speed dónde estas? vertical speed...trece cuatro cientos.
[okay vertical speed where are you? vertical speed...thirteen four hundred.]

12:14:01.2
HOT-1 cuánto tengo de...no no es mucho.
[how much of...no it's not too much.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:13:41.1
APR November Five Whiskey Foxtrot descend and maintain one three thousand four hundred.

12:13:45.9
RDO-2 one three thousand four hundred.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:14:03.8
HOT-2

asi se nos borro toda la llegada. verdad si? buey.
[# the whole arrival got erased. right yes? dude.]

12:14:06.5
HOT-3

**.

12:14:06.9
HOT-1

no le pedimos tiempo.
[no we'll ask for time.]

12:14:07.1
APR

November Five Whiskey Foxtrot fly heading two niner zero.

12:14:10.6
RDO-2

now heading two nine zero one one Five Whiskey Fox.

12:14:13.4
HOT-1

heading two niner zero.

12:14:15.8
HOT-3

no te preocupes...ya ya puse nada mas voy a cambiar
(algunos).
*[don't worry...now now I've put them I'm just going to change
(some).]*

12:14:19.5
HOT-2

okay.

12:14:27.5
HOT-2

estamos ciento ocho cinco. once quince. once DME fuera...
*[we're one hundred eight five. eleven fifteen. eleven DME
out...]*

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:14:32.7
HOT-1

ahora estoy en heading...por lo tanto le voy a poner otra vez
por si se me borro.
*[now I'm in heading...therefore I'm going to put it in again in
case it was erased.]*

12:14:36.7
HOT-2

trece...JARGU es a trece nueve.
[thirteen...JARGU is at thirteen nine.]

12:14:39.5
HOT-2

si.
[yes.]

12:14:44.5
CAM

[sound of two beeps, similar to an ident]

12:14:44.9
HOT-?

**.

12:14:48.0
HOT-1

ah no tengo la frecuencia? no. me la pones?
*[oh I don't have the frequency? no. could you put it in for
me?]*

12:14:50.9
HOT-2

ahí estas once cinco. 'ta puesto.
[there you are eleven five. it's put in.]

12:14:53.4
HOT-2

estas en el mio. vete al al tuyo. el localizador. el uno. eso es.
*[you're in mine. go to to yours. the localizer. the number one.
that's it.]*

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:14:57.4
HOT-1

*

12:14:58.1
HOT-2

te pongo el curso ciento cincuenta y uno de entrada.
[I'm putting the course one hundred and fifty one of entry.]

12:15:06.4
HOT-2

ciento cincuenta y uno de entrada. ahí esta.
[one hundred and fifty one of entry. there it is.]

12:15:09.0
HOT-1

sin embargo no lo tengo yo en--
[however I don't have it on the--]

12:15:010.0
HOT-2

pero por que va a course dos #?
[but why does it go to course two #?]

12:15:12.0
HOT

[sound of c-chord, similar to altitude alert]

12:15:12.8
HOT-1

'ta en la frecuencia...ah--
[it's on the frequency...ah--]

12:15:13.7

APR

November Five Whiskey Foxtrot turn right heading zero two zero.

12:15:17.7

RDO-2

zero two zero on the heading one one Five Whiskey Fox.

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:15:20.9
HOT-1

cero veinte.
[zero twenty.]

12:15:22.8
HOT-2

quitame el * loc en el uno carnal.
*[take off the * loc on the number one bro.]*

12:15:24.6
HOT-1

pero cero veinte por la derecha?
[but zero twenty to the right?]

12:15:25.3
HOT-2

cero veinte por la derecha. si si si.
[zero twenty to the right. yes yes yes.]

12:15:30.6
HOT-1

dile que si por la derecha. no?
[say that if it's to the right. no?]

12:15:32.3
HOT-1

si bueno 'ta #.
[yes well it's #.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:15:32.4
RDO-2

confirm* one one Five Whiskey Fox zero two zero on the heading?

12:15:36.2
APR

November Five Whiskey Foxtrot turn right heading zero six zero now.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:15:37.6
HOT-2

trece cuatro cientos.
[thirteen four hundred.]

12:15:39.9
HOT-3

zero six zero.

12:15:40.8
RDO-2

zero six zero now.

12:15:41.8
HOT-1

esta ajustado a trece cuatrocientos. ah...ahí esta vertical speed. dejalo que llegue a trece cuatrocientos.
[it's adjusted to thirteen four hundred. ah...there is vertical speed. leave it until it gets to thirteen four hundred.]

12:15:47.7
HOT-?

que es eso?
[# what's that?]

12:15:48.6
HOT-2

si verdad. heading zero six zero.
[yes right. heading zero six zero.]

12:15:51.3
HOT-1

ahí esta. altitude select. trece cuatro cientos.
[there it is. altitude select. thirteen four hundred.]

12:16:10.9
HOT-2

okay cero seis cero.
[okay zero six zero.]

<u>TIME and SOURCE</u>	<u>INTRA-COCKPIT CONTENT</u>	<u>TIME and SOURCE</u>	<u>AIR-GROUND COMMUNICATION CONTENT</u>
12:16:14.2 HOT-2	localizer one por que no esta? <i>[localizer one why isn't it there?]</i>		
12:16:17.9 HOT-2	once quince. <i>[eleven fifteen.]</i>		
12:16:19.8 HOT-2	por que tengo curso? <i>[why do I have a course?]</i>		
12:16:36.5 HOT-1	el heading que nos dio es que? <i>[the heading that we received is what?]</i>		
12:16:39.8 HOT-1	cero... <i>[zero...]</i>		
12:16:40.5 HOT-2	seis cero. <i>[six zero.]</i>		
12:16:40.5 HOT-1	seis cero. verdad? <i>[six zero. right?]</i>		
12:16:41.4 HOT-2	si. <i>[yes.]</i>		
12:16:53.9 CAM	[Splice in Tape]		

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

12:17:10.7
HOT-2 ciento veinte rapido.
[one hundred twenty quick.]

12:17:11.9
HOT-1 na' mas ponme JARGU.
[just put in for me JARGU.]

12:17:15.3
HOT-1 estamos listos?
[are we ready?]

12:17:18.7
HOT-2 ciento veinte a interceptar.
[one hundred twenty to intercept.]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:16:57.1
APR November Five Whiskey Foxtrot four miles from JARGU turn
right heading one two zero cross JARGU at one three
thousand four hundred. cleared Localizer DME Echo
approach.

12:17:05.6
RDO-2 one two zero on the heading to intercept the localizer ah DME
one five. ah one one Five Whiskey Fox.

12:17:10.8
APR and November Five Whiskey Foxtrot cleared Localizer DME
Echo approach.

12:17:15.4
RDO-2 Localizer DME Echo approach one one Five Whiskey Fox.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:17:21.1
HOT-2

estamos a quince punto cuatro.
[we are at fifteen point four.]

12:17:23.5
HOT-2

estamos eh...
[we are uh...]

12:17:27.0
HOT-2

...dale a approach.
[...hit on approach.]

12:17:29.4
HOT-1

approach.

12:17:34.1
HOT-2

perdon perdon perdon te movio.
[sorry sorry sorry it moved you.]

12:17:35.0
HOT-1

'perame.
[wait for me.]

12:17:35.9
HOT-2

si.
[yes.]

12:17:37.8
HOT-1

necesito el ciento cincuenta y uno curso.
[I need the one hundred and fifty one course.]

12:17:41.1
HOT-2

ya estaba puesto.
[it was already put in.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:17:42.2
HOT-1

ya lo quito pero bueno.
[he took it off but good.]

12:17:48.0
HOT-2

okay localizer attitude glideslope my.
[okay localizer attitude glideslope my.]

12:17:49.4
CAM-3

quince...lo vas a hechar manuale.
[fifteen...you're gonna do it manually.]

12:17:53.2
CAM-3

por que no. no lo podemos hacer.
[because no. we can't do it.]

12:17:56.1
HOT-1

okay.

12:17:56.7
CAM-3

a quince millas. a trece punto uno trece cuatrocientos.
[at fifteen miles. at thirteen point one thirteen four hundred.]

12:18:01.5
APR

November Five Whiskey Foxtrot contact tower.

12:18:04.5
CAM-3

ya estas...en altitude.
[you're at...on altitude.]

12:18:04.8
RDO-2

contact tower.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:18:06.2
HOT-1

pos vamos a ponerle flaps por favor.
[well let's put in flaps please.]

12:18:07.0
HOT-2

okay.

12:18:08.1
CAM-3

flaps speed...vamos a la siguiente...once novecientos.
[flaps speed...let's go to the next one. eleven nine hundred.]

12:18:09.0
HOT

[sound of click, similar to flap handle]

12:18:13.2
HOT-1

okay.

12:18:13.6
HOT-3

yo te digo cuando bajas. eh? (mira adentro).
[I'll tell you when you go down. eh? (look inside).]

12:18:14.7
HOT-1

ujum.
[uhum.]

12:18:16.1
HOT-3

**.

12:18:17.1
HOT-2

trece seiscientos.
[thirteen six hundred.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:18:17.9
HOT

[sound of c-chord, similar to altitude alert]

12:18:18.8
HOT-2

hasta diez novecientos.
[until ten nine hundred.]

12:18:20.2
HOT-1

aja.
[uhum.]

12:18:21.8
CAM-3

(ese no no) ahora si. aja. doce...novecientos. ya ya.
[(not not that) now yes. uhum. twelve...nine hundred. yes yes.]

12:18:25.6
HOT-2

okay. doce novecientos.
[ok. twelve nine hundred.]

12:18:27.5
HOT-2

okay vamos a bajarle la velocidad.
[okay let's slow down the speed.]

12:18:27.7
TWR

[Aspen Tower clears Regency 865 for takeoff, winds 310 at 16. advises there is traffic on an 11 mile final]

12:18:28.0
HOT-1

el vertical?
[the vertical?]

12:18:28.7
HOT-3

vertical.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:18:29.7
HOT-1

okay.

12:18:31.9
HOT-1

check.

12:18:32.0
HOT-2

gear down?

12:18:33.4
HOT-1

gear down.

12:18:34.3
CAM

[sound of increased noise, similar to gear being lowered]

12:18:36.1
HOT-3

(quite speed).
[*take off speed.*]

12:18:37.1

RDO-TWR November One One ***.

12:18:38.1
CAM

[sound of c-chord, similar to altitude capture (3.8 second duration)]

12:18:42.8
HOT-3

flaps treinta.
[*flaps thirty.*]

12:18:44.4
HOT-2

speed check. flaps thirty.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:18:45.7
CAM

[sound of click, similar to flap handle]

12:18:49.7
HOT-1

y el viento # de veintiseis nudos # madre. eh. ahorita por las
montañas a ver si se alivian.
*[and the wind # it's twenty six knots mother #. eh. soon
through the mountains to see if they'll alleviate.]*

12:18:52.2
CAM-3

no te preocupes...*
[don't worry...]*

12:18:54.3
HOT-2

la velocidad. que te pongo?
[the speed. what do I put for you?]

12:18:56.5
HOT-2

ciento cuarenta?
[one hundred and forty?]

12:18:58.5
HOT-1

si.
[yes.]

12:19:00.1
HOT-2

okay aproximada la velocidad.
[okay approximate velocity.]

12:19:01.3
HOT-1

de doce novecientos estamos a diez millas. después de diez
millas cuánto?
*[from twelve nine hundred we're at ten miles. after ten miles
how much?]*

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:19:05.1
HOT-2

hasta nueve millas te puedes bajar a doce treceintos.
[until nine miles you can go lower to twelve three hundred.]

12:19:06.2
CAM-3

treinta ocho. no. ponle ahí.
[thirty eight. no. put it in there.]

12:19:08.1
TWR

[Aspen Tower clears Sea Breeze 823 to line up and wait.
advises traffic is on a 9 mile final.]

12:19:10.2
CAM

**.

12:19:11.9
HOT-2

dentro de diez nueve a doce trecientos. hasta de diez nueve.
[inside ten nine to twelve three hundred. until ten nine.]

12:19:16.5
HOT-2

estamos aquí a doce trecientos.
[we're here at twelve three hundred.]

12:19:17.4
HOT-3

ya.
[yeah.]

12:19:18.2
HOT-1

doce trecientos.
[twelve three hundred.]

12:19:19.0
HOT-2

sí.
[yes.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

12:19:21.3
HOT-3

a doce trecientos.
[to twelve three hundred.]

12:19:24.5
CAM-3

(okay baja).
[(okay lower).]

12:19:26.2
HOT

[sound of c-chord, similar to altitude alert]

12:19:31.4
HOT-2

okay.

12:19:33.2
HOT-1

doce trecientos.
[twelve three hundred.]

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:19:22.2
TWR

November one one Five Whiskey Foxtrot Aspen Tower.

12:19:24.7
RDO-2

go ahead.

12:19:25.9
TWR

runway one five continue for November one one Five Whiskey Foxtrot.

12:19:29.1
RDO-2

we'll continue ah one one Five Whiskey Fox.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:19:33.3
HOT-2

dentro de nueve...doce...a once setecientos. ya te puedes bajar a once setecientos.
[inside nine...twelve...to eleven seven hundred. now you can go lower to eleven seven hundred.]

12:19:35.3
TWR

[Aspen Tower asks a Regency flight to make a left hand turn after takeoff due to traffic on a 7 mile final]

12:19:39.4
HOT-3

ya aquí puedes ir bajando.
[here you can start descending.]

12:19:41.1
HOT-1

okay.

12:19:41.3
HOT-2

estás okay.
[you're okay.]

12:19:42.1
TWR

November one one Five Whiskey Foxtrot traffic twelve o'clock seven miles turning westbound nine thousand two hundred.

12:19:42.7
HOT-2

dentro de s...
[inside of s...]

12:19:47.4
HOT-3

observa baja la velocidad.
[look lower the speed.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:19:47.7
RDO-2 IFR.

12:19:48.7
HOT-1

ey.

12:19:51.4
HOT-2

baja la velocidad. baja la velocidad. ciento treintiocho.
[lower the speed. lower the speed. one hundred and thirty eight.]

12:19:52.0
HOT-3

de ocho.
[from eight.]

12:19:54.5
TCAS

traffic. traffic.

12:19:56.2
HOT-1

no mames.
[don't kid me.]

12:19:56.3
HOT-2

okay viene un traffic sí.
[okay here comes one traffic yes.]

12:19:57.1
HOT

[sound of c-chord, similar to altitude alert]

12:19:59.1
HOT-2

cuidado eh?
[careful eh?]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:20:00.2
HOT-1

bien.
[good.]

12:20:01.7
HOT-1

dos mil seiscientos pies abajo.
[two thousand feet below.]

12:20:03.0
HOT-2

sí.
[yes.]

12:20:03.1
HOT-3

diez docientos.
[ten two hundred.]

12:20:04.6
HOT-2

está a tres millas.
[it's at three miles.]

12:20:05.4
HOT-3

ya te puedes bajar hasta diez docientos. vas alto. eh?
[now you can go lower until ten two hundred. you're high. eh?]

12:20:08.5
HOT-1

okay ya lo suelto ya la #.
[okay now I let it go now the #.]

12:20:08.9
TWR

November one one Five Whiskey Foxtrot traffic no factor. ah disregard. traffic no factor westbound now.

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

12:20:25.0
HOT-2 speed brake le puedes meter #. te estás quedando alto.
[you can put in speed brake #. you're staying high.]

12:20:29.2
HOT-2 métele speed brakes. métele speed brakes.
[put in speed brakes. put in speed brakes.]

12:20:29.3
HOT-1 seis por tres dieciocho.
[six by three eighteen.]

12:20:32.9
HOT-2 ahí esta la pista.
[there's the runway.]

12:20:33.3
HOT-1 # madre. tren abajo.
[# mother. gear down.]

12:20:35.5
HOT-2 estás alto.
[you're high.]

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:20:14.8
RDO-2 roger. ah one one Five Whiskey Fo...Whiskey Fox on IFR
conditions now.

12:20:19.4
RDO-2 now clear.

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:20:35.6
CAM-3

full flaps.

12:20:36.2
CAM

[sound of click, similar to flap handle]

12:20:37.9
HOT

[sound of c-chord, similar to altitude alert]

12:20:38.4
CAM-3

vámonos *.
[let's go *.]

12:20:40.7
HOT-1

ujum.
[uhum.]

12:20:35.6
TWR

November one one Five Whiskey Foxtrot wind three three zero at one six runway one five cleared to land. one minute average three two zero one four gust two five.

12:20:45.0
RDO-2

ah roger one one Five Whiskey Fox.

12:20:50.4
HOT-2

'ta alto. le dicte GPWS.
[it's high. I'm calling out GPWS.]

12:20:53.4
HOT-1

ahí estan dos y dos. uhm bueno ya se están empezando a rociar.
[they're two by two. uhm well now they're starting to (spray).]

<u>TIME and SOURCE</u>	<u>INTRA-COCKPIT CONTENT</u>	<u>TIME and SOURCE</u>	<u>AIR-GROUND COMMUNICATION CONTENT</u>
12:20:55.4 HOT-2	no no no.		
12:20:58.2 HOT	[sound of c-chord, similar to altitude alert]		
12:21:00.5 HOT-2	viento está de cola de treinta y nueve. como treinta y cinco de cola. cuidado. <i>[tail wind is thirty nine. like thirty five tail wind. careful.]</i>		
12:21:04.2 EGPWS	sink rate.		
12:21:05.1 HOT-2	sí sí sí. <i>[yes yes yes.]</i>		
12:21:05.6 EGPWS	sink rate.		
12:21:09.2 HOT-2	siete. <i>[seven.]</i>		
12:21:09.3 CAM-3	bajando yo te voy a quitar el...flight spoiler. <i>[as we go lower I'll take out the...flight spoiler for you.]</i>		
12:21:11.7 HOT-1	ujum. <i>[uhum.]</i>		

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:21:12.1
CAM-3

okay.

12:21:14.2
CAM-?

*.

12:21:14.2
EGPWS

sink rate.

12:21:15.5
EGPWS

sink rate.

12:21:16.2
HOT-2

métele pues si. un poquito de potencia. ahora si ahora si
estamos entrando. ahora si estamos entrando.
*[put in well yes. a little power. now yes now yes we're going
in. now yes we're going in.]*

12:21:17.3
HOT-1

no no tengo nada pero...ahora si quitámelos.
[no I don't have anything but...now yes take them from me.]

12:21:18.7
CAM-3

**.

12:21:22.0
HOT-1

ahora si (#).
[now yes (#).]

12:21:26.5
HOT-2

quítale. si quítale. quítale potencia menos menos menos
menos menos menos menos menos.
*[take off. yes take off. take off power.less less less less less
less less less.]*

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:21:29.3
HOT-1

las rojas # espérence buey pues necesito controlar este #.
[the reds # (y'all) wait dude because I need to control this #.]

12:21:32.2
HOT-2

ahí esta ciento cuarenta...estás en velocidad....eso es.
[there it's one hundred and forty...you're at speed...that's it.]

12:21:32.6
HOT

five hundred.

12:21:36.5
HOT-2

este viento esta de cola si va *. 'ta cabrón esto.
*[this wind is from the tail. yes it *. This is screwed.]*

12:21:39.1
HOT-1

ta' de la (retever).
[this is of the (relook).]

12:21:42.4
HOT-2

viento...a lo mejor ahorita se calma por la montaña.
veinticuatro.
[wind...maybe it will calm down by the mountain. twenty four.]

12:21:46.4
HOT-2

síguete al centro. al centro. eso es.
[follow to the center. to the center. that's it.]

12:21:49.9
HOT-2

al centro. eso es. ahí vas. [strained tone]
[to the center. that's it. there you go. [strained tone]]

12:21:51.3
CAM

[decrease in background noise, similar to power reduction]

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:21:52.1
CAM-3

cien pies.
[one hundred feet.]

12:21:53.3
HOT-2

cien pies.
[one hundred feet.]

12:21:54.2
CAM-3

métele por...
[put it through...]

12:21:54.8
HOT-2

oy oy [strained tone].

12:21:56.6
HOT-1

no. # vientos estan cabrónes.
[no. # winds are screwed.]

12:21:56.7
HOT-2

oy ah * * [strained tone].

12:21:58.8
CAM-3

baja (spoiler).
[lower (spoiler).]

12:21:59.4
HOT-2

no no. cuidado cuidado. [strained tone]
[no no. careful careful.]

12:22:00.5
HOT-2

no nos vamos. [strained tone]
[we're not going.]

TIME and SOURCE

INTRA-COCKPIT CONTENT

TIME and SOURCE

AIR-GROUND COMMUNICATION CONTENT

12:22:01.1
CAM-?

**.

12:22:01.6
HOT-3

bájale.
[lower it.]

12:22:02.3
HOT-3

bajanos.
[lower us.]

12:22:02.4
HOT-2

no.
[no.]

12:22:03.3
HOT-2

vámonos.
[let's go.]

12:22:03.5
HOT-1

**.

12:22:03.7
CAM-3

bajanos.
[lower us.]

12:22:04.2
CAM

[change in background sound, similar to power increase then decrease]

12:22:05.1
CAM

[sound of rumbling, similar to contacting runway]

**TIME and
SOURCE**

INTRA-COCKPIT CONTENT

12:22:05.4
CAM [sound of two tones, similar to either the take-off configuration warning or flight spoilers extended]

12:22:05.5
HOT-? ah [strained voice]

12:22:05.9
CAM [sound of cyclical whistling tone, similar to stall warning]

12:22:06.7
HOT-? vámonos vámonos.
[let's go let's go.]

12:22:07.9
HOT-? [sound of multiple screams/yells]

12:22:09.7
CAM [sound of thunk]

**END OF TRANSCRIPT
END OF RECORDING**

12:22:10.0 MST

**TIME and
SOURCE**

AIR-GROUND COMMUNICATION CONTENT

12:22:06.7
TWR go around. go around. go around. go around.