

Mr. Ron Feile

Oral History

Kennedy Space Center

Interviewed August 10, 2004

Interviewer:

Dan Keenan

Transcriptionist: Mandi Falconer  
All Points Logistics

1 [Chatter at beginning]

2 Keenan: Today is Tuesday, August 10<sup>th</sup>, 2004. My name is Dan Keenan. I'm working  
3 for the KSC oral histories project led by Gregg Buckingham. I'm interviewing Ron Feile  
4 and we are the KSC Press Site. So, start out with Ron, if you would state your name,  
5 your full name, and your birthday, and your mailing address, your telephone number, just  
6 your contact information and your correct spelling.

7

8 Feile: I am Ron Feile. The spelling is F-E-I-L-E. It's Ronald E. Feile and I was born  
9 October 13<sup>th</sup>, 1949, St. Mary's, Pennsylvania. And here at Kennedy Space Center my  
10 address is SGS-346 at the Shuttle Landing Facility, Kennedy Space Center, Florida  
11 32815.

12

13 Keenan: Alright. So, you said where you were born. Could you repeat that for me  
14 please?

15

16 Feile: I was born in St. Mary's, Pennsylvania.

17

18 Keenan: Ok. How long did you live there?

19

20 Feile: I lived there through my high school career. In 1968 I was out of there.

21

22 Keenan: Ok.

23

24 Feile: 1968.

25

26 Keenan: Where did you go to college?

27

28 Feile: Went to college at Indiana University at Pennsylvania, but only for one year and

29 that was after my military service. My military service was from 1969 to 1972.

30

31 Keenan: Ok. What did you do in the military?

32

33 Feile: In the military I was an air traffic controller, also, just like I am now. That's where

34 my initial training began for the air traffic control field. My aviation background went

35 back further than that, even to training in Minneapolis, Minnesota with a Northwest

36 Airlines sponsored school called Gail Institute. That was in 1968 after high school

37 graduation.

38

39 Keenan: Ok. So that's where you got your degree from?

40

41 Feile: That's where I got my initial airline training was there and I got a certificate of

42 completion for that. Yeah.

43

44 Keenan: Ok. You said you'd gone to college for one year prior to the military service?

45

46 Feile: No, it was after the military.

47

48 Keenan: After military service, ok. Was there any further educational...

49

50 Feile: The further educational requirements beyond that were when I finally was hired by  
51 the FAA in 1973. They had me do more extensive air traffic control training in  
52 Oklahoma City. It was a standard FAA academy format for their air traffic controllers.

53

54 Keenan: Ok. With your military expertise or training, what comes to mind about that  
55 period of time in your life?

56

57 Feile: Well, that was tough time because after the airline administration school my  
58 objective was to employed by the airline, but my draft classification with the Vietnam  
59 War in progress was keeping me from getting any gainful employment and the airline  
60 administration field were ticketing. So, then I decided that pursuing the military was  
61 probably my best option. So, rather than be drafted I enlisted ahead of that and had  
62 assurances for air traffic control school then.

63

64 Keenan: Ok. So that's when you followed up on air traffic control?

65

66 Feile: That's correct.

67

68 Keenan: And then after, how long were you with the military total again?

69

70 Feile: For 3 years.

71

72 Keenan: 3 years. Ok. When did you begin your NASA career?

73

74 Feile: Well, my NASA career here at Kennedy Space Center actually started in 1982. I  
75 came here in the fall of 1982 and started in the security medical fire dispatching field out  
76 of the Launch Control Center. I started with Wackenhut at that time, but it was only 3  
77 months until that contract changed and Wackenhut turned into EG&G.

78

79 Keenan: Going back, it just dawns on me that I didn't ask you what happened between  
80 your military and your NASA.

81

82 Feile: Between the military and the NASA career I got out of Vietnam in 1972 and was  
83 released from the military at that time and started college at Indiana University at  
84 Pennsylvania in 1972, also. And I finished that first year of college with a major in  
85 occupational safety and health, which was just a very new field. The importance of the  
86 OSHA administration was just coming about in the classroom there. So, after that year of  
87 college the FAA came to me and said they were in need of air traffic controllers. That's  
88 where I curtailed my college degree in order to be gainfully employed by the FAA. SO, I  
89 became an air traffic controller then in 1973 at Eerie, Pennsylvania and went to  
90 Oklahoma City to their academy for air traffic control school and radar school and stayed  
91 in Eerie from 1973 until 1979 and came to Florida at Orlando in 1979.

92

93 Keenan: Did you work at the Orlando Airport?

94

95 Feile: I worked at the Orlando downtown where it was termed an airport at the time.

96

97 Keenan: Is that now the Executive Airport?

98

99 Feile: It's Executive now.

100

101 Keenan: Ok. Ok. Did you know from early on that you wanted to work with planes and

102 air traffic control?

103

104 Feile: Only after I got out of high school. I think that kind of developed in high school

105 and my interest in aviation was there so I decided to pursue it in some fashion. And then

106 air traffic control seemed to be a good pathway when the military came around.

107

108 Keenan: Do you have your pilot's license?

109

110 Feile: No, I don't have a pilot's license.

111

112 Keenan: Ok. So, it says, I've already asked you about your NASA career, when did you

113 arrive at KSC. In terms... What was your first job connected to development of, how

114 should I say this, what was your first job with NASA?

115

116 Feile: Well, the first job here was the security fire medical dispatching in the LCC, but  
117 that only lasted until the new contract turned into EG&G.

118

119 Keenan: EG&G, Ok.

120

121 Feile: When EG&G took over the responsibility for the Shuttle Landing Facility in 1983  
122 then I was only a few months before I was able to work my way out there and put my  
123 aviation background experience to work out there.

124

125 Keenan: What was your next step? What was that transition?

126

127 Feile: The transition into that was into a coordinator at the Shuttle Landing Facility and  
128 because of the qualifications of the manager out there and the other personnel that were  
129 with me, we were all former controllers and NASA had no air traffic control, positive  
130 control responsibilities at the SLF when we go there. But they soon realized that they  
131 were wasting the talents of a lot of people by not having it. And eventually acquired an  
132 air traffic control tower that sits exactly where it is today. And that's the old control  
133 tower and then the new control tower is soon to be occupied at the Shuttle Landing  
134 Facility, also.

135

136 Keenan: It's in development now?

137

138 Feile: That's correct.

139

140 Keenan: When's the completion date?

141

142 Feile: The completion date for the Shuttle has passed and we're installing the  
143 communications equipment now.

144

145 Keenan: Ok.

146

147 Feile: And we're to occupy it in the next few months.

148

149 Keenan: Ok. Being a person who's never been in a tower before, could you give me  
150 some insight into what it takes to run that? What are the roles?

151

152 Feile: Well, there's a multitude of hats that we wear at the Shuttle Landing Facility when  
153 we took it over in 1983 the primary responsibility was to operate and maintain the  
154 runway and to handle the traffic and have the runway adequately prepared for the Shuttle  
155 mission that it supported. That's the primary function. And the secondary function, then  
156 is to handle all of the administrative aircraft and the training, the Shuttle with the Shuttle  
157 Training Aircraft that goes on out there for the flight crews, and also for whatever other  
158 purposes that NASA has in mind for it.

159

160 Keenan: What kind of weather considerations do you consider or is there somebody else  
161 that does that?

162

163 Feile: Well, we don't do any of the weather forecasting from there, where we do stay  
164 appraised of the weather because of its importance to the flight crews. And we also assist  
165 first-hand with the weather assessment for launch day activity for Shuttle...

166

167 Keenan: Ok.

168

169 Feile: ...in order that the flight crew knows exactly what to expect should they have to  
170 return to the launch site on launch day.

171

172 Keenan: Are there any special preps for RTLS or Return to Launch Site?

173

174 Feile: There are some special preps. First of all the runway is thoroughly walked down.  
175 We do a manual walking down of the runway for any FOD concern issues. There are  
176 also other (??? 170) that are going on for the navigational aides, the lighting aides, and  
177 the electronic landing aides. All those have to be ready to go and with redundancy in  
178 order to support the RTLS. The same thing goes on for the Shuttle landing, the mission  
179 landings then.

180

181 Keenan: Ok. Is it true that you got an award for FOD?

182

183 Feile: We've had a couple of awards from the FAA for the FOD awareness that we do  
184 out there. The FAA's acknowledged that and NASA has, also.

185

186 Keenan: Excellent.

187

188 Feile: So we do a lot of preventive FOD activity out there and the proactive part of that is  
189 to follow and do the prescribed runway walk downs that are required to make sure the  
190 runway's ready for the orbiter's to return.

191

192 Keenan: Was there some modification to the runway that you....

193

194 Feile: Yes. Through my career, almost 2 decades, well over 2 decades now, they've done  
195 some extensive modifications. The runway was originally grooved for the entire 15,000  
196 feet of length and 300 feet of width and in 1987 when the downtime crew post-  
197 Challenger, they took that opportunity to grind down and smooth out the surface, actually  
198 change it into a smoother corduroy effect in order to alleviate some of the problems that  
199 the orbiters had been encountering with tire spin up on the original hard grooved surface.  
200 The original surface was much too rough a texture it cost 200 ply of tires when the static  
201 tires where touching down on the runway. So, they decided that they needed a much  
202 smoother surface in order to initiate that and they only put that in on the first 3,500 feet of  
203 each end in order to accommodate the touch down and the initial spin up of the main tires  
204 on the landing.

205

206 Keenan: Was there some change to the centerline?

207

208 Feile: The centerline lighting system was installed, well first of all, when NASA created  
209 the runway they had a centerline system installed that ran the full length of the runway.  
210 They also had touchdown zone marking lights that later proved to be more of a problem  
211 then they did a solution for orbiter operations. The cans that held the lights were too  
212 elevated above the surface of the runway, actually created a concern for the touch down  
213 on those canned lids for the lights, as well as for the orbiter nose wheel touchdown along  
214 the entire length of the centerline. So, they had those lights removed and later on then we  
215 installed, when the technology caught up to the differences, we eventually installed a  
216 much lower profile series of center line lights that were designed primarily in night  
217 opportunities to give the flight crew of the orbiter a good feel for being able to stay on the  
218 center line. Basically they're landing with the xenon search lights at their back and  
219 landing into their own shadow basically because of the configuration of those lights. SO,  
220 throughout that shadow now they can see the centerline through the center line lights.

221

222 Keenan: Got you. So that brings me to the safety. What areas, what are your key areas  
223 of safety that you ponder? We've talked about FOD. We've talked about lighting.

224

225 Feile: Well, the key areas of safety are continually providing positive control to all of the  
226 aviation interests that are operating in the Kennedy Space Center area. The flight crew,  
227 the astronaut flight crew, of course, transition in their T-38's quite a bit and Kennedy  
228 Space Center has their own fleet of helicopters and 1G2 aircraft and those aircraft operate  
229 regularly out the Air Force security and other missions. And there's a really good  
230 transition of satellite payloads that come in on Air Force and civilian larger aircraft and

231 then NASA has its own fleet of satellite carriers in their 747 and their Super Guppy  
232 aircraft. So, we're regularly handling those missions for NASA and also for the Air  
233 Force with some of their expendable satellite payloads. We get a lot of use out of that.  
234 We recently covered the Air Force skid strip on the Cape Canaveral side because they  
235 were down for 3 or 4 months. So, all their overflow traffic came to us and we had a  
236 much larger amount of aircraft activity.

237

238 Keenan: Ok. So with regards to safety I heard you mention security, FOD... if you were  
239 to pick your top 5 key concerns that you monitor closely, what would they be?

240

241 Feile: Well, in addition to monitoring the condition of the runway, which is out  
242 contracted responsibility, we've also got the responsibility for the air traffic control side  
243 of the aviation around Kennedy Space Center and there other landing sites for helicopters  
244 around Kennedy Space Center for which we also share the responsibility. Those are  
245 prescribed helipads that are used both for Shuttle missions and sometimes for VIP aircraft  
246 or other missions. We also have the responsibility as air traffic controllers out there since  
247 1999 we have created and assumed the responsibility for watching the Eastern Range of  
248 airspace, which is an Air Force function. So, when we're operating around the control  
249 tower area that's for NASA and for Kennedy Space Center, but we're also working for  
250 the Air Force in monitoring the air space at the Eastern Range and that has significantly  
251 increased since September 11<sup>th</sup> because of the security concerns for the visibility of the  
252 payloads and the assets that lie within air space over which we are responsibility.

253

254 Keenan: So you partner pretty heavily?

255

256 Feile: Partnered very heavily now. In the same contract the joint (???) operation  
257 support contract, JBOSC, and my company, SGS, maintain the responsibility to both  
258 NASA for the ground operation and to the Air Force for the air space and monitoring.

259

260 Keenan: When we're talking about air traffic control when you go to work and you're in  
261 the tower doing you business, what is that like? What systems do you use? What is a  
262 day in your life like?

263

264 Feile: Well, the systems that we use are basic air to ground communications, really a  
265 series of communications frequencies that are assigned to us for the control tower  
266 purposes and we also have a ground control that is, we're in control of the ground control  
267 vehicle transitions occur so that we can safely integrate both of those. Certainly, you  
268 don't want to have your vehicle landed on by some of the aircraft activity that we have  
269 going on out there. So, positive control involves the separation of the ground vehicles  
270 and the air vehicles, also. So, the communications features involve a Quintron system,  
271 it's a 40 button system, it had the land lines that go back and forth to the other air traffic  
272 positions in Daytona and Orlando, Miami and Jacksonville, so that we can integrate  
273 smoothly with them with any aircraft transitions that need to occur. And those ground  
274 control frequencies we also have on this same panels the frequencies that are shipped to  
275 us by the Air Force on the Eastern Range so we can talk to security and fire and medical  
276 on those nets also. We also have the convoy nets that are involved strictly with the

277 Shuttle, the orbiter operations of landing and preparation for landing. There's quite a  
278 diverse array of different communications capabilities we have. I think our demand for  
279 nets and frequencies are probably as high as anywhere else on the KSC side with the 40  
280 button system.

281

282 Keenan: When you're watching planes and aircraft move, when do you begin to get a  
283 little nervous. What conditions pique you?

284

285 Feile: Well, it depends on which hat we're wearing. From the MRU side, there is no  
286 complexity any greater than Shuttle launches and, of course, those are the times that we  
287 have the greatest responsibility for observing what is going on because NASA has its  
288 own fleet out there doing weather, airborne fleet, aircraft, doing weather assessment,  
289 we're very careful about making sure that they have the run of the air space that they  
290 need. There's a large amount of set aside air space that the FAA gives us in order to do  
291 the weather assessment in advance of the launches. For NASA and since September 11<sup>th</sup>  
292 now there are security additions inside that air space and there are also other localized  
293 NASA security assets on the ground and in the air at lower altitudes that need to be  
294 controlled and in their proper place at certain times for certain events in the Shuttle  
295 countdown.

296

297 Keenan: I'm sure you have pre-prescribed process for managing all that.

298

299 Feile: Yes, We have an aircraft....

300

301 Keenan: And a schedule.

302

303 Feile: Yeah.

304

305 Keenan: What's it called?

306

307 Feile: It's called an air craft control plan and it has the times, the altitudes, and the  
308 frequencies and the missions prescribed for all of the aircraft that participate.

309

310 Keenan: So, it would be a, pardon my lack of a better word, it's a dance. People need to  
311 be in a certain place at a certain time?

312

313 Feile: Right.

314

315 Keenan: It's prescribed to that detail.

316

317 Feile: Yep. And to answer the other half of that question, from a control tower standpoint,  
318 the complexity grows when we're doing Shuttle training because of the types of aircraft  
319 that we're handling, also. NASA has its fleet of G2 aircraft that are highly modified to  
320 fly in reverse out of the sky actually. They go up to 45,000 feet, throw it in reverse, and  
321 put the gear out and controlling that descent is actually the method of training in the same  
322 fashion that the orbiter descends when it descends at 19 and 21 degrees. So, falling out

323 of the sky in a controlled format is the way they train astronauts in the G2's to fly the

324 Shuttles the same way.

325

326 Keenan: Is there a particular nickname for that aircraft?

327

328 Feile: Well, it's called the Shuttle Training Aircraft. The STA.

329

330 Keenan: Yeah. Ok. There's another one I'm thinking of.

331

332 Feile: I think you're thinking of the KC135 which they use as the Vomit Comet because

333 of the parabolas that they fly trying to create and sustain zero gravity.

334

335 Keenan: Yeah.

336

337 Feile: Most of that activity is flown out of Houston. So, we don't get to see that a lot.

338 We see the aircraft occasionally, but we don't get to see the zero-G work on the Eastern

339 Range like they do at Houston.

340

341 Keenan: In terms of landings, for you is there any difference between a Shuttle landing

342 and just a plain landing coming in from the same direction?

343

344 Feile: Absolutely. The Shuttle landing will occur on one end of the runway of the other,

345 but the preparation that go into being ready for that are what are most significant because

346 of the involvement of the convoy being properly deployed and then making sure that all  
347 of the preps are completed for that. And then after the actual landing, when the orbiter's  
348 wheels stop, it's just the start of the activity for us because we have to also continue to  
349 make sure that safe transitions occur on the runway. And we have on occasion used the  
350 runway while the orbiter is on the runway, which is not always an easy situation nor safe  
351 application unless you really work at it. It takes a lot of work to do that. But, when the  
352 orbiter lands and sits at one end of the runway to be processed, the other end of the  
353 runway becomes available for departures, but not for arrivals.

354

355 Keenan: Yes.

356

357 Feile: So, we can still get aircraft transitions taken care of as well as the helicopters,  
358 which are both the Air Force H-60 helicopters and the Air Force, or the NASA H-1  
359 helicopters are both still involved in the post-landing safing and the post-landing security  
360 of the orbiter until it's back in the Orbiter Processing Facilities.

361

362 Keenan: Got you. So you are in communication with the convoy commander...

363

364 Feile: Absolutely.

365

366 Keenan: ... on a regular basis.

367

368 Feile: On a frequent basis.

369

370 Keenan: How many hours prior to scheduled landing does that begin?

371

372 Feile: The actual air space begins to be activated at 5 hours prior to landings and  
373 continues on through and then a certain portion of that remains active in order to protect  
374 the orbiter while it's on the runway.

375

376 Keenan: Got you. Can you remember one landing that stands out to you?

377

378 Feile: Really, there are a few that stand out to me, but the intention of the Space Program,  
379 of the Shuttle Program is to waste the first 2,500 feet of the runway on purpose - for  
380 safety's sake. And even at the point that the instrumentation brings them down to, there's  
381 2500 feet down the runway. Occasionally, we'll have people that have landed early or  
382 have landed late and, you know, there are some that are more interesting to watch than  
383 other. But, they've all been interesting. The most, the programs most significant landing  
384 that I've been involved with, I think, was STS, I think it was 51, 51C. It was the (???) 262  
385 flight that landed and they nearly blown the tire prior to the wheel stop. They did blow  
386 one tire just prior to wheel stop and that turned into the reasons why the runway surface  
387 was redone shortly thereafter.

388

389 Keenan: Interesting.

390

391 Feile: We've had, you know, we've had some interesting times and the concerns that we  
392 hear from the Shuttle flight crews are what happens if an accident does occur and it  
393 leaves the runway, there's not much space to go before you're into the canals or into the  
394 wildlife around the Space Center. So, they're very careful about how they plan and  
395 execute the mission.

396

397 Keenan: It sounds to me, when I think of your title, one of the titles I've seen Lead air  
398 traffic Controller, it seems to be much broader scope than that title would dictate.

399

400 Feile: Yeah. It is. Very seldom do you see in the industry an air traffic controller who  
401 has the additional responsibilities of the amount of air space that we have from the Easter  
402 Range standpoint and the rules by which that air space is handled are completely different  
403 because it's a military radar unit. It's not a civilian FAA facility. So, that's significant  
404 and the other side of the air traffic control portion that people aren't aware of, are the  
405 contracted requirements for the operation and management of the runway and the facility  
406 itself. So, we have make sure that it's maintained to the FAA certified standards because  
407 we are an FAA inspected facility. So, it's very frequent in a day that we have 3 masters  
408 to answer to, the FAA, NASA, and the United States Air Force for some of the work we  
409 do.

410

411 Keenan: I heard that you have some special connections: NORAD, Santa?

412

413 Feile: We normally watch the scope to keep the skies clear for Santa on the Christmas  
414 Eve opportunities that he is working on. Safe skies.

415

416 Keenan: Well, the kids around the neighborhood will be happy to hear that.

417

418 Feile: Yep. I'm sure they appreciate that.

419

420 Keenan: That's good of you. I didn't realize your job had that kind of clout.

421

422 Feile: That's the kind of days that we have where not 2 are the same. Even December  
423 24<sup>th</sup> on a Christmas Eve is not quiet all the time.

424

425 Keenan: As you look back on your career, are there some people that come up that  
426 you've worked with?

427

428 Feile: Sure, there are people that come out. The managers of the Shuttle Landing  
429 Facility, we've been through 3 or 4 of them, their vision, their foresight into the way  
430 things can be improved have always been very interesting to me. And I've always been  
431 involved in the history of the Shuttle Landing Facility because of its unique place in the  
432 Space Program. It's the only NASA facility that's owned and operated and designed to  
433 specifically support the Shuttle mission. That's what it was approved for when it was  
434 approved, and construction began in 1975 and I just like that a lot. The people that I've  
435 been involved with in addition to them, the astronaut corps has always been very

436 supportive of what we're doing, making sure that we're taken care of in many respects  
437 and the NASA side, the engineering side that has always kept an eye on our runway has  
438 always been very supportive of our operation too. And I (??? 407) done some significant  
439 mods and changes out there and every one of them has been well thought out. The  
440 runway itself has supported the Shuttle program in a very constructive way for a lot of  
441 years.

442

443 Keenan: I hear rumors of when it was first developed one particular engineer doing some  
444 high speed wind testing.

445

446 Feile: We've had all kinds of different opportunities out on the runway and we've had  
447 racecars on the runways and we've had laser operation on the runway, only because it's  
448 the hardest, flattest, smoothest piece of concrete and the longest piece of concrete in  
449 Central Florida. So, we get a lot of unique R&D opportunities out there and some of  
450 them are a lot of fun to watch. As well as the film industry, because the film industries  
451 use the runway pretty extensively for "Armageddon" and "Space Cowboys" and a little  
452 bit of the "Contact" movies. So, a lot of exposure for KSC, so hopefully it's all come out  
453 in a very positive light.

454

455 Keenan: You know, what are some of the specs, some of the "gee whiz" kind of specs for  
456 the runway?

457

458 Feile: The gee whiz, well, like I said it's the flattest and the hardest and the longest.  
459 Basically it's 15,000 feet by 300 feet of concrete and 16 inches thick on top of 6 inches of  
460 soil cement, which the soil cement was layed on top of what was graded from the canals  
461 in order to create a surface hard enough to support the weight of the concrete that was  
462 laid. It was laid like in 8 traffic lanes. I think it's 8, maybe it's 12. A lot of traffic lanes  
463 out there that were laid in 20 by 25 foot slabs until they had a complete runway surface.  
464 But the significant modifications we've done since then, we've put 50 foot asphalt  
465 shoulders on it. It has 1,000 foot by 300 foot overruns on each end of the runway. It has  
466 standard approach light systems and runways, high intensity runway lighting, the  
467 centerline light system which we've already talked about. So, there are a lot of features  
468 and, of course, the microwave scanning boom landing system is pretty unique to the  
469 Shuttle Program. That's designed to be able to acquire an orbiters track and an orbiter  
470 can land on the runway automatically with just the opposition of the microwave landing  
471 system as it's designed. The potential for a disable crew is very light that in fact... in the  
472 instance that it might happen, the capability is still there in design.

473

474 Keenan: At what point do they transition form automatic pilot to manual

475

476 Feile: They begin, well first of all, they come through the de-orbit burn and begin  
477 tracking onto the KSC TANCAN system, which is Tactical Air Navigation System, and it  
478 brings them from where they are to the field. When they get in the area of the field at  
479 high altitudes, usually at 25,000 feet or above, they start acquiring the microwave landing  
480 system and the microwave landing system from the point that they go over the TACAN

481 brings them into 270 degrees plus or minus turn, into the final approach course around  
482 25,000 feet at which point they begin the final descent and from that transition from  
483 TACAN to the (??? 448), I think a lot of that is handled manually, even though the  
484 automatic systems are capable of doing it themselves.

485

486 Keenan: Ok. I've heard there is in that transition there is a bit of a wobble or pogo.

487

488 Feile: I don't know. I've never heard that. I've heard that most of the transition is pretty  
489 smooth and the only real concerns for that kind of response is when the weather systems  
490 that frequently affect the runway from a tropical standpoint around here. Sometimes you  
491 get a little bitty shear, sometimes you can get a little bit of vibration. Those are the things  
492 I'd be more concerned about.

493

494 Keenan: What is your relationship like with the astronauts? Do you often get to visit with  
495 the Astronaut Corp or the engineers and technicians that support landing?

496

497 Feile: The Astronaut Corp comes through regularly, and they come through as flight  
498 crews quite frequently, and, of course, the prime crew, there are 2 significant events, the  
499 test count down, TCDT, and the actual launch mission for which they arrive together as a  
500 crew and begin the process of the launch with the test countdown. Those events are all  
501 handled with a lot of response from public affairs and that's good. The other thing is the  
502 remainder of the time, the remainder of the T-8 transitions that occur from the Cape  
503 Crusaders, excuse me, the astronauts that are basically assigned from Johnson Space

504 Center to Kennedy Space Center to watch the procedures and the flow transitions here  
505 and make sure that the interface between the work crews, the orbiter processing, and the  
506 Astronaut Corp, that there is a link for that team. Those transitions occur regularly and  
507 we see the astronauts on a regular basis. We've always had great response from them.  
508 Very safe transitions with the T-38. We've never had a serious T-38 accident before with  
509 the time that I've been here.

510

511 Keenan: Excellent. In terms of convoy ops, just in general, what do you have to say?

512 What's your experience?

513

514 Feile: Convoy operation are very interesting because what we do, basically, is at the time  
515 that the orbiter touches down is we turn the runway back over to NASA and NASA and  
516 the United Space Alliance team comprise the convoy. Do whatever it takes to safe the  
517 orbiter and extract the crew, process it on the runway and prepare it for the rollback to the  
518 Orbiter Processing Facility. So, we basically just turn it over to them and try to stay out  
519 of their way as they do the processing required and we've had very good relations with  
520 them. You know, we handle all that's going to happen in the pre-ops meetings that occur  
521 from the United Space Alliance and NASA side.

522

523 Keenan: Ok.

524

525 Feile: The NASA Test Director and the Convoy Commander are working closely  
526 throughout the landing and the transitions so that it's pretty seamless in the transition  
527 phases.

528

529 Keenan: Ok. Well, I had one question, at what altitude does a launching Shuttle get on  
530 your radar?

531

532 Feile: There are other radars that have the responsibility for that. The air traffic control  
533 radar is not as adept at picking it up right off the ground. You can get a target, but the  
534 initial phases of that launch the target is nearly vertical. When we normally seeing  
535 aircraft transition in the horizontal fashion. So, we do get a target, but it's, you know, the  
536 electronics that go along with aircraft targeting aren't there for the orbiter, so you don't  
537 see anything. You get a primary hit from the orbiter which generally increases sweep to  
538 sweep because of the increased speeds that it's going. So, it's interesting to see and try to  
539 point out. It's the same thing coming back from the de-orbit burn. When it gets in the  
540 area and you hear the sonic booms you're in the position where you can actually begin to  
541 track it, but it's very difficult to see because of the speeds and the configuration. So, I  
542 mean, with no electronics to depict anything on the radar.

543

544 Keenan: You know, on one day I remember seeing plane, I worked in the annex, up here  
545 at the annex, and I remember seeing a plane fly by and it was just absolutely massive. It  
546 was one of the Russian planes. What are some of the unusual aircraft you've seen on the  
547 SLF or the runway?

548

549 Feile: Since the signature dried on the paper that got us involved in the Mir occupancy  
550 that we had up there with the Russian on Mir, that alliance there created opportunities for  
551 us to handle, and the end of the Cold War also encouraged that. But a lot more of the  
552 Russian aircraft are being involved now in the transitions of payloads around Kennedy  
553 Space Center and that's because the Antonov aircraft, the 125 and 225, those larger  
554 aircraft have been taken over by a conglomerate that is run out of England now. So, the  
555 team with Great Britain have these aircraft flying regularly around the United States and  
556 the decreased availability of the military aircraft because of (??? 510) on different fronts  
557 make the civilian aircraft a lot more available for the payload transition that we get in at  
558 the SLF. That's why we see more of them. So, we've had the Antonov fleet in, we've  
559 had the (??? 513) from Russia in, and we have NASA's own Super Guppy as well as the  
560 Air Force aircraft, the Air Force C-5's and the C-141's and C-17's that carry payloads in  
561 and out on a somewhat regular basis.

562

563 Keenan: And you mention, what was it, the Guppy?

564

565 Feile: The Super Guppy.

566

567 Keena: And the Beluga? Is there something called the Beluga?

568

569 Feile: The Beluga is an Air France aircraft which is designed to carry the larger payloads  
570 also. And, of course, the European Space Agency, USA contracts with them for their  
571 international deliveries primarily for the Space Station.

572

573 Keenan: Also, I just noticed, go back to, you've gotten several other awards I haven't  
574 mentioned. You got a Silver Snoopy.

575

576 Feile: I've got the Silver Snoopy. I've got that and I've also had the Space Flight  
577 Awareness Award. They are very special to me because the travel that goes with the  
578 Space Flight Awareness Award, going to Houston and seeing what is going on out there  
579 with the flight crews and the amount of training that goes into their mission was very  
580 significant. The underwater facility that they train in, those things were all available to  
581 me when I was out there, very impressive. And the Silver Snoopy Award was just for  
582 work that was just done, I think, around the time of the center line light installation when  
583 we modified from the centerline light system into what's usable by Shuttle today.

584

585 Keenan: Is there anything else that comes to mind that you want to mention?

586

587 Feile: No. I mean, it's good in this format that we're using today to be able to point out  
588 the diversity that we encounter on a daily basis out there and the types of jobs that we're  
589 doing. That it's not just one job, it's actually 3 or more. It's an honor to be able to share  
590 that with people in this format and I'm just thankful for the honor.

591

592 Keenan: Yeah. You know, when you just get down it, as a novice with air traffic control  
593 I know virtually, I just know very little about it, when you're talking to other air traffic  
594 controllers and they have their area of expertise, what are you most proud of? What is  
595 your best, what is your expertise.

596

597 Feile: I'm very fond of the fact that the MRU, the Military Radar Unit, which has only  
598 been in existence since 1999 was taken from 0 to proficiency in about 4 to 5 months.  
599 There was no history of the Military Radar Unit when the Patrick Air Force Control  
600 Organization closed in that time and the Eastern Range needed someone capable of  
601 interfacing on the air traffic control side, using the air traffic control language with the  
602 existing air traffic control facilities, and came to us with the original concept that a  
603 Military Radar Unit would be a good thing. And so, we attempted to model it after the  
604 Western Range, Vandenberg Air Force Base, but we had to devise our own training  
605 program because of the uniqueness of a lot of the operations that we handle here. They  
606 don't do Shuttle in Vandenberg and so there were significant modifications to be made to  
607 be made in the preparation for that. And we did that in about 4 months starting in early  
608 1999 and had qualified controller in place, trained, and procedures established that were  
609 actually meeting the standards of the Air Force Space Command as well as the FAA in  
610 about 4 months. So, that's probably one of the accomplishments that I think was more  
611 significant through the career.

612

613 Keenan: So, you've had to integrate not only KSC processes, but military processes.

614

615 Feile: Very much so. Yeah. And military process were something that we weren't  
616 familiar on a regular basis and our responsibility prior to that had been only the runway  
617 itself and positive control for the aircraft around the runway. So, we're monitoring a  
618 larger amount of which since then, since the inception of the MRU, has quintupled after  
619 September 11<sup>th</sup> because of the needed air space that was determined to be necessary to  
620 protect the assets that KAS and the Air Force have. So, we've gone through significant  
621 growing pains since the MRU's inception and then it's enlargement in 2001.

622

623 Keenan: Was the MRU, was 9/11 impetus for that?

624

625 Feile: Yeah. Well, the MRU, the impetus was the closing of the Patrick Air Force Base  
626 Radar Approach Control in 1999. So, we had only been in it from early 1999 to 2001.  
627 So, two years is are a relatively small amount of time to grow and finalize your  
628 procedures. So, by the time we were able to really get comfortable with what we were  
629 doing the whole paradigm changed again with the review of the requirements to keep the  
630 air space and its assets safe.

631

632 Keenan: What does the future look like?

633

634 Feile: The future for the SLF looks good. We're in the process of the new control tower.  
635 It's under construction and once the new control tower gets established, the comms going  
636 in at this time, once that comm is established the Military Radar Unit is going to be  
637 working side-by-side, shoulder-to-shoulder with the air traffic control tower controller

638 and there's an additional new system that's available to us now. The bugs are still being  
639 worked out, but the new NASA funded ASR-11 or GPN-30 radar, which has recently  
640 been installed on the north end of Kennedy Space Center is another great asset that is  
641 going to give us additional radar coverage to do more of the things we want to do form an  
642 air space observation standpoint. So, those two things are happening side-by-side and  
643 should be available to us together when we get into the new control tower.

644

645

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646 Keenan: You know, as you look back from where you started in this and now to the  
647 present and the development of the new tower, what are some of the challenges an air  
648 traffic controller comes up against all the time?

649

650 Feile: Well, the challenges are primarily at the SLF are trying to maintain the proficiency  
651 that we need during not only the down time of the Shuttle being down and out of business  
652 for another period of months and also the recent addition of the air space that precluded  
653 any of the civilian air craft activity from getting to the Shuttle Landing Facility. So, my  
654 traffic count is significantly down but we are still trying to maintain a proficiency that we  
655 need and the readiness that we need to go back into Shuttle launches. So, that's a  
656 problem not only for the air traffic control tower side, but also for the Military Radar  
657 Unit. We have at least 2 people in training at this time that we can't qualify as full  
658 performance level controllers until we can get them some Shuttle launch and landing  
659 experience. So those things are hardships that we are working through and just standing  
660 by to get back on track just like a lot of Kennedy Space Center is doing.

661

662 Keenan: Yeah. Hopeful.

663

664 Feile: Hopeful. Optimistic. Ready.

665

666 Keenan: In the interim, are you keeping the alligators off the runway. It's a very unique  
667 system out there because we are precisely across purposed with the rest of the Fish &  
668 Wildlife team at the Merritt Island Wildlife Refuge. Their purpose is to encourage all the  
669 wildlife they can and our purpose is to discourage them as much we can from being in the  
670 airplane environment where safety hazards are created with birds and other living FOD  
671 on the runway. So, we're across purposes all the time with that, but we have specific  
672 responsibilities for clearing bird activity around Shuttle training events because of the  
673 very crucial nature of the dives, when we are diving with Shuttle Training Aircraft. It's  
674 pretty dangerous out there to be diving in that configuration and to take bird strike in an  
675 engine would be very exciting, from the cockpit standpoint. So, that's what we're out  
676 there to try to prevent.

677

678 Keenan: Just bear with me, what's the biggest alligator you've ever seen out there?

679

680 Feile: Well, the biggest one, we had one called Jack and he was at it regularly on the  
681 South end of the runway and he was probably 12 to 13 feet. Very large.

682

683 Keenan: Wow.

684

685 Feile: Well, luckily he stayed away from the runway environment. They prefer to stay  
686 where they can escape quickly into the water which leads them into the canals and then  
687 they provide an extra element of animal control for the rest of the smaller wildlife  
688 because nobody gets past them to get to the runway.

689

690 Keenan: Oh, that's excellent. Well, I'm sort of running out of questions to ask you but I  
691 do have one. You kind of alluded to it when you were talking about the military Radar  
692 installation but, as you look back on your time out here what are you most proud of?

693

694 Feile: I think I am most proud of the way that we have met the challenges of keeping the  
695 runway configured to be both what the FAA wanted as well as NASA wanted and what  
696 met the Shuttle Program requirements. We never wavered from that objective. It took  
697 some engineering skills in order to see what needed to be done and to interface with the  
698 proper teams to make the things happen that the Shuttle Program needed. So, we've done  
699 a lot of those mods and done a lot of progressive things out there in the 2 decades I've  
700 been out there. So, I guess I'm most proud of the continuity we've been able to provide  
701 in support of Shuttle Program.

702

703 Keenan: Well, it's been an honor talking to you today, Ron. I appreciate your dedication  
704 to America and the Space Program and it's been a pleasure to meet you for the first time  
705 and hear your stories.

706

707 Feile: My pleasure, too.

708

709 Keenan: Alright. Thank you.

710

711 Feile: Thank you.