SETP FOUNDATION ORAL HISTORY PROGRAM
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COLONEL HARRY ANDONIAN, USAF (RETIRED)
March 23, 2007
Dana Marcotte Kilanowski
Interviewer

INTRODUCTION

The following is an interview with famous test pilot Colonel Harry Andonian, USAF (Retired) for the Society of Experimental Test Pilots Foundation's Oral History Program, made possible by the generous support of the Northrop Grumman Corporation and individual donors, for the Society of Experimental Test Pilots Foundation, Lancaster, California. In this interview, Colonel Andonian will discuss his experiences as an Air Force pilot during World War II and as a test pilot following his C-54 assignment to Germany, flight testing bombers at Wright Patterson AFB during the Cold War, Chief of Special Projects Operation Branch, U-2 flight test, EC-135N Apollo Range Instrumentation Aircraft (ARIA), flying 204 combat missions in the F-4 Phantom out of Cam Ranh Bay during the Viet Nam War, serving as Chief of Flight Test Operations and Vice-Wing Commander for the 4950th Test Wing at Wright Patterson AFB, Chief Test Pilot For E-Systems, FAA Designated Pilot Examiner. Colonel Andonian has accumulated over 25,000 flying hours during his long and distinguished aviation career.

Biography

Colonel Harry Andonian, USAF (Retired) received his pilots wings in June 1944 at Williams Field, Arizona. His first flying assignment was with the ferrying group of Air Transport Command (ATC), flying trainers, fighters, cargo and bomber aircraft. In 1945, during World War II, he was assigned overseas flying C-47s in the China-Burma-India Theater, followed by a C-54 assignment to Germany, where he flew in the Berlin Airlift from July to September 1948.

Andonian began his flight test career in 1950 at Eglin AFB with the Armament Test Center. In 1955 he transferred to Wright Patterson AFB, where he flew B-26, B-29, B-47, B-50, B-52, B-57 and B-66 test aircraft. In 1958 he graduated from the British Empire Test Pilot School. Upon graduation from ETPS, he was assigned to the Air Force Flight Test Center at Edwards AFB, where he served as Chief of Special Projects Operations Branch, U-2 Flight Test from January 1959 to June 1966.

In 1966, Andonian was assigned to Wright Patterson AFB to introduce the EC-135N Apollo Range Instrumentation Aircraft (ARIA) into the Air Force inventory. During the Vietnam War, Andonian volunteered to serve as an F-4 squadron commander flying 204 combat missions out of Cam Ranh Bay, Vietnam. He was subsequently reassigned to Wright Patterson AFB to serve as Chief of Flight Test Operations and Vice Wing Commander for the 4950th Test Wing.

Upon his retirement from the Air Force in 1971, he became Chief Test Pilot for E-Systems, Inc in Greenville, Texas, where he completed the final flight testing of the single engine turboprop L-450, which was the prototype for the USAF Compass Dwell Program. This work included first flight and subsequent flight test of the XQM-93A, including pressure suit flights to 50,000 feet in an unheated and unpressurized cockpit.

Following his E-Systems retirement in 1988, Andonian continues to serve as an FAA Designated Pilot Examiner and flies his Beech Debonair approximately 200 hours per year. A Fellow of the Society of Experimental Test Pilot, Colonel Andonian has accumulated over 26,000 flying hours in over 200 types of aircraft throughout his long and distinguished career. He has been honored with the Department of Transportation/FAA Wright Brother Master Pilot Award, inducted as an Eagle into the Flight Test Historical Foundation Gathering of Eagles and a 2009 inductee into the Lancaster City Aerospace Walk of Honor.

INTERVIEW

Kilanowski: This is Dana Marcotte Kilanowski for the Society of Experimental Test Pilots Foundation's Oral History Program. I am interviewing Colonel Harry Andonian during the 2007 SETP Annual West Coast Symposium at the Catamaran Resort Hotel in San Diego, California. This unclassified interview takes place on Friday, March 23rd, 2007. The cameraman is Bill Kelly, courtesy of the Northrop Grumman Corporation. SETP would like to thank the Northrop Grumman Corporation for their generous on-going support of SETP's Oral History Program. Good afternoon Colonel Andonian.

Andonian: Good afternoon.

Kilanowski: Can you please give me your name, your full given name, date, and place of birth?

Andonian: Yes, my full name is Harry Andonian and place of birth is up in Michigan, Detroit, Michigan.

Kilanowski: Thank you. What made you decide to become a pilot?

Andonian: When I was a little boy about four years old, I saw an airplane and I thought, "Gee, I want to do that," so before I even went to kindergarten, I thought I'd like to fly, and even in kindergarten, I learned to draw pictures of airplanes. And when I was not yet ten years old, the family used to have picnic gatherings out in a field somewhere, and in those days there were a lot of barnstorming pilots around and we happened to be near one of those events, and I conned an airplane ride, and I was sure then that I wanted to be a pilot. And so that's what started me and I was oriented toward that, and World War II came along and kind of helped in a way, because they eliminated the requirement for having two years of college education and high school was acceptable, and so that's how I really got going, till I got to the dentist and, "Oh, you got some teeth that need to be worked on. Get them fixed and come on back."

So I did, and when I came back, I had a partial (dental plate), and, "Oh, we can't accept you with a partial." I was just an eighteen-year-old kid. He said, "You know, the Army is accepting you like that."

So I went down the hall and got in there, and they said, "Oh, you should have been here last week. You have to be in the military now so we can get you into the flying program."

So then I voluntarily inducted and went off and applied for it with them and finally got it.

I got accepted for the Air Force, I got a letter from the Navy and they said they'd lowered their requirements. "Now we'll accept you with a partial."

And I wrote back and said, "You're too late." [laughs] And that was the beginning.

Kilanowski: Well, that was probably the best mistake that ever happened to you! How do you think your life would have been different in your flight test career?

Andonian: Anything different? Well, I think flight testing is probably the epitome of flying. I think that flying these aircraft in some kind of a test program, learning more about them and helping to derive the books for the using people, I think that was the way to go. I wanted to do that. You fly a lot of different airplanes, and I think that's a healthy situation too. So in my time, unlike some of our more senior people here—like Guy Townsend, I think he's flown probably something like 300 -and-some-odd different airplanes, and I'm approaching 300, so there's always someone a little bit above you.

But anyway, flying, initially when I got in the military, of course, we were in World War II and just surviving was the main thing there, and even then, before I graduated from flying school at age twenty, and by the time I was twenty-two, I'd flown most of the airplanes we had in the inventory because I was in the Ferry Command. And one thing led to another and I eventually got involved into Test Pilot School. Do you want me to continue on and tell you how I got in Test Pilot School?

Kilanowski: Yes, please.

Andonian: I was already in flight tests at Eglin about five years and then transferred to Wright-Patterson, again in flight tests, for a little over two years, and I applied for the school at Edwards and I was denied because they said, "Your academic credentials," mainly math was not really up to snuff yet. "Reapply later." But my application was forwarded for foreign school, and at that time, they were selecting, like, maybe one person from the entire Air Force and one from the Navy, and I was one of the Air Force guys. So somebody up there was looking after me, and I went to the Empire Test Pilots School and I came back to Edwards.

An interesting story here, you're going to ask me how I got in the U-2s and everything, but I will lead into that. Before I finished the Empire School, the Flight Test Center had sent a team over there to look at some of the British airplanes, and during their time over there, they came by the school to look me over and to let me know that when I got back, I was going to come back to Edwards, not Wright-Patterson and they were going to put me on a B-52 program because I was a B-52 pilot.

So when I got back and I checked in, Colonel Royal N. Baker, who later became a lieutenant general, advised that I'd be getting on the U-2 program. I had no clue as to what a U-2 was. I think I saw some kind of a hazy picture in *Aviation Week*. And he said, "Because of your B-47 experience with the bicycle landing gear," that's why he was going to put me on the U-2 program. In actual fact, one of the fighter pilots who was temporarily on the program, had killed himself in the U-2 flying out of North Base, so

when you were there and actually in a flight test section, I think the word got around, "Let's get this new guy and put him on it." That's how I got into U-2s.

But looking back on it all, I think it was an experience that the U-2 was the most challenging airplane probably that I've ever flown, and particularly on landing, but there was more to it, the pressure suit, the high altitudes, and the length of the flights that we flew, the missions, and it was a whole different world. And flying it, I was just telling Joe Guthrie earlier today, that if you could land it properly, there was not an airplane out there that you couldn't land better than most people. Anyway, that's my U-2 entry and a brief look at the kind of flying we did. Do you want me to go on and tell you some of the stories about it?

Kilanowski: Yes, I'd love to hear your U-2 stories.

Andonian: Okay. One of the questions you asked in there was "Can you recall some special event that occurred?" There were several, and I'll give you a couple of brief ones. One occurred when I was on the East Coast flying in Massachusetts. We had a weather package on our U-2, and while we were there, a hurricane was forming off the East Coast of America. The hurricane people had their airplanes down for maintenance. It was kind of post-season, and they asked us if we could we go out there and take a look at that and track it and advise the weather people which way it was going. And my weather people said, "Man, let's do that. Let's get out there and have a look at that. And not only that, while you're there, fly down into the eye and every 2,000 feet, level out, take some readings, and go on all the way down to 1,000 feet above the water and then come back up."

"Yeah, okay. We'll look at that."

So I went out and I found the storm and tops were somewhere around 48,000 feet or so, and the eye was sort of an oblong thing. It wasn't a real tight circle, and I thought, "Well, yeah, I think I can get in that thing and fly it on down," and I did. And when I got down near the surface, the water was like glass down there, but looking at the edge of the eye, the water was like maybe 50 feet high and just frothing. It looked real wild. Then I thought, "Gee, Harry, if you bail out of this thing and have to bail out and you're in that one-man dinghy trying to survive and paddling like hell to stay within the eye, to keep away from those 50-foot waves."

And then I climbed up incrementally a couple thousand feet and took readings all the way up to the top, and then I tracked that for about three and half hours and then came back to Massachusetts. That storm, Betsy or Becky, I think it was, it eventually hit the North Carolina coast, but it was a late-season one and it wasn't all that intense. But the weather people had data that they were more than a year just reducing the data on it.

Another time flying out of Edwards I was on a test mission checking the engine and I flew up the Owens Valley toward Bishop, California, and we were checking it for a fuel control change, and at 57,000 feet the fuel control gave out, so at the same time, the oil pressure went to zero on the engine, so I couldn't restart the engine anyway, but it

failed. And now I'm up near Bishop, California, quite a ways from Edwards. So I shut everything down and came back up with my radio and called Flight Test and told them what the situation was. "Well, you're going to have to set down out there or you're going to bail out. What are you going to do?"

"Well, let me see if I can get back toward the lakebed."

So I headed back down, and if you're familiar with the mountain waves, you know, they occur, particularly along the Sierra Nevada, I found that I could get on a mountain wave at about 50,000 feet, and I rode that thing like a cushion all the way back toward Edwards like a glider. Of course, I had some glider time, so I knew about that.

When I got back over Edwards, I'm still at about 30,000 feet, so I had lots of altitude, and then I had to land on the lakebed because the wind was kind of strong to land on the runway, and when I did, my boss, then Clayton Peterson, greeted me. He says, "What kind of an emergency was that?" He said, "Where have you been?" [laughs] But we got that down safely.

And the other ones, the SAC people had been doing it, but I think crossing the ocean with a single-engine airplane, I made several trips to Hawaii with it. That's always a challenge, you know, because you do your own navigation, and that wasn't too much of a problem because of the high altitude that we were flying. And I think one of your questions was how high do we fly. We'd start around sixty-some-odd-thousand feet and then cruise climb and end up a little over seventy thousand feet, and the winds up there are very light normally, and so you can fly the same flight card every time and get there right on the button. We flew at night most of the time so we could take readings off the stars with our celestial navigation, but you never really needed it. If you took off at a certain time and your card said such-and-such a star ought to be there when you're looking at this angle, they were always there and it worked fine.

And so other than that, I think the bottom line on the U-2 was the discomfort of having to wear a partial pressure suit at the time and doing the mission and flying maybe seven, eight hours, and then wake yourself up for that landing because it was a real challenge. So about 1,000 hours of that was what I had with it. Good program.

Kilanowski: What was the most significant contribution do you think you made to the—

Andonian: The U-2s?

Kilanowski: Yes.

Andonian: Well, I think our program was weather, and we helped out for the supersonic transport by—we had a program called HICAT measuring turbulence in different parts of the world, including the Pacific and, of course, the United States, South America, and also Europe. And we also helped out on the B-70 program. When they were beginning their test program intending to go Mach 3, they talked about flying at altitudes where we

were and they said they didn't expect to encounter any turbulence up there, and I assured them that there was turbulence up there.

We got an extra little job there to fly—before the B-70, to fly their test missions, we would run a track or fly that same track that they were going to fly and advise them if there's any turbulence. Now, when we encountered the turbulence, it was kind of a phugoid motion like that, but at our airspeeds it wasn't a problem. We'd kind of go up and down with it, but with the B-70 going supersonic, it was like a washboard and it was very rough for them. So we aided in that program.

And I think, of course, some of the things we tested we still can't talk about, but it helped for our security, and we did things for the Strategic Air Command testing various equipment for their use on the airplane. So that was a big contribution. We all know the U-2 is still active today, although it's a much bigger airplane and has more equipment onboard for what they do. And I'm not into that. I can't tell you what they're doing, but I'm sure it's very important, and they're going to be around yet, I understand, for another twenty years.

Kilanowski: Which is phenomenal, for an airplane.

Andonian: Really. Really is.

Kilanowski: Were you part of the U-2 program when Francis Gary Powers was shot down [over the Soviet Union].

Andonian: Yes, I was in the program then and I knew Powers. When he came back to work for Lockheed a little bit, there were times when we'd have to send an airplane into Burbank for some work on it, and Gary would come up and fly it in. He was one of the pilots that did that. Let me put it this way. Mr. Ray Gowdy was the Lockheed test pilot that was my check pilot when I checked out in the U-2 back in '59. I didn't know Gary Powers that well, but, well enough as a fellow test pilot.

Kilanowski: Was it a shock when he was—

Andonian: When he got shot down?

Kilanowski: Yes.

Andonian: Well, we knew what was going on over there, you know, vaguely, but the shock was the media around this part of the country, the Los Angeles area, all want to know about the U-2, so we did some disguising work on one of my U-2s and rolled it out there and then made a little briefing to the media about the U-2, and we didn't play anything down very much. I said we were mainly interested in weather investigations up here, and, "Here it is, and that's it." They seemed to be happy with that.

Kilanowski: And how did his getting shot down change your program, or did it change it at all?

Andonian: No, it didn't change our program at all. No. I don't know if you're aware, but they had several other countries that were flying the U-2. Are you aware of that? Anyway, and some of them had been shot down, but I never got into where and what and how they were shot down, and I'm thinking that the defenses of the country, Russia at the time, finally got around to where they could track these airplanes and effectively put something up there to shoot them down. I'm not too sure about the details, whether Gary flew down a little bit lower for some reason or what, but the missile got him anyway, and I guess we had to bargain to get him back out of the country. Then he later killed himself in a helicopter, I think, flying Highway Patrol or something, safety. I forget what it was, but he ran out of fuel, my understanding.

Kilanowski: Which is unfortunate. I wanted to talk to you about the stall speed of the U-2. It sounded like it was very easy to stall. Was it an exhausting plane to fly? Unforgiving?

Andonian: Unforgiving is a good word. But if you knew the way the airplane operated, it took a while to get accustomed to that, of course, but flying at altitude, the airplane flew up what we call a coffin corner, if you will. If you went a little bit too fast, a few knots too fast, then you got a Mach buffet and shake the airplane around a little bit, and if you slow down a little bit from that, you were in a stall buffet, so there was a little corner that you got up into and as the airplane lightened up, you'd get more into that, then you'd have to get back down.

The engine operated at full power up there. We could pull the power back and the fuel control wouldn't let the engine come back at all. We had to put some drag out to get the airplane down to a level where the RPM would come back, the thrust would come back, and so there were times on a particularly long mission we'd put the gear down and actually put the speed brakes out to help to keep us away from that corner as the airplane lightened. And then it was really a slow process to get from peak altitude down to a level where the rate of descent could increase and come on down. I'm talking like maybe 20,000 feet or so before you finally got backed off enough to come down at a more rapid pace. It took some time to get down, short of cutting the engine off completely, which would create more problems than you'd want to face. It was a process just to get down from altitude.

And landing the airplane, if you didn't get it right down to like two or three knots above the stall, it wouldn't land, it would just keep on floating down the runway. We later added a parachute, a little drag chute back there so that in your flair you could pop that chute and it would help you land the airplane. You could obviously land without it, but it took a little bit of technique to do that properly.

That, and we had to deal with the winds, like any airplane, and the crosswind could be kind of disastrous if you didn't do it properly. The airplane, as you know, had a

bicycle gear, main gear, and a tail wheel, and if you didn't have the airplane properly lined up to land, you could just run off the runway with it. And there were times when we just couldn't take that runway particularly. We'd have to land on some other runway. At Edwards, it wasn't a problem. We had a lakebed out there to land on. So sometimes you'd just have to wait for the conditions to righten before you came in. Stall speed was very critical.

Anyway, and if you tried to go around with the airplane, you know, you didn't like your landing approach, for some reason you're bouncing along and you feed the throttle to it, from the intake back to the engine was a long way, so the engine didn't respond real quickly, and so you had to be very patient before it came in to where you could effect a safe go-around. It was very challenging. People that just had a few rides in it didn't like it at all. They wanted to get away from it. But once you learned how to really fly it properly, it was kind of a rewarding experience just when you got down saying, "Hmm, I got down okay."

Kilanowski: You belong to a very elite organization called the Roadrunners. Can you tell me a little bit about them?

Andonian: Well, the Roadrunners are people who've flown the early version of the SR-71, the YF-12, and also U-2 people, and, in fact, we're going to have a meeting this year. We meet every two years up in Las Vegas, and they're like a society, I guess, but they don't do very much for aviation anymore other than get together and tell stories. [laughs] I'm not going to say it's a dying society, but the input—you don't have any more SR-71 people, and the group that's in there now are just getting older. U-2 people are still around, and they'll be around for twenty more years, so, I don't know, maybe that will extend the life of the Roadrunners. But my association with them began with one of the SR-71 pilots putting me in there as a member, Bob Gilliland. You know him. So we meet every two years and tell stories.

Kilanowski: Well, exciting stories I'm sure they were. The ejection system in the U-2.

Andonian: Ah. The early program, the ejection system in the U-2, you had to open a canopy, get rid of the canopy and then bail out, and I don't know if you're aware of—one of the SAC people flying over Cuba during the Cuba Missile Crisis ejected. They sent a missile up there and he had to leave the airplane, but when he went, the canopy didn't come completely off, so that when he ejected, it actually kind of split him in two. So then we ran some tests later, the Lockheed people did, and we ran some where we ejected right through the canopy, and that's the way our systems were approved. They put canopy-buster on our seats, so that would go through the canopy. Of course, I never did it, but that was the way we would have to egress if we have to.

Kilanowski: Overall, what do you think that the U-2 contributed to aerospace technology and to our defense?

Andonian: Well, to begin with, just the high-altitude aspect of it was very beneficial, and getting an air-breathing engine up there functioning properly. But for data gathering or information relaying, it was ideal as opposed to, say, a satellite operation where you couldn't stop the satellite up there and you'd have to wait till it made another pass, so to speak. U-2 could survey an area, quite a wide area, and relay that information real-time to whoever the recipient might be. And they're still doing that today, I think, very effectively.

So the contribution that they make is still there, and it will be a continuing effort, as opposed to, say, the SR-71 or anything else up there that has to be supersonic to even get up there. The SR makes a pass and that's it, and he can't loiter, so to speak, over a given area. It's going to be a Mach 3-plus pass, and that's going to go by pretty rapidly. I'm not saying they didn't gather lots of useful information, but it was a hit-and-run. So the U-2 contribution, I suspect it'll be longer than twenty years, unless we come up with some technology that can get, say, a balloon up there or something that high and keep it in place. But I suspect something like that will be hard to control, you know, without some kind of a mechanism to get it up there and back down. I don't know. So the U-2 contribution to security of this country I think is still very valid. It'll be here for a while.

Kilanowski: Before we leave the U-2 and go on to the EC-135 ARIA program, did you ever meet and work with Tony LeVier?

Andonian: I met him. I never worked with him. I knew him during our various meetings out here, and I respected him very much for his talent and what he contributed to the flying business. He worked with Lockheed for quite a while and flew the first flight on a U-2 and got his other people started on it, so I think that when you come out very cold in any airplane without realizing just what the characteristics are and taking off, that's the beauty of this test pilot challenge, that nowadays what they do, they air tunnel a lot of the models and so on before they fly them, but there are still unanswered questions, and that's why a test pilot is very valid. Tony was one of the top people on that, and I respected him very much for it.

Kilanowski: How were you recruited for the EC-135 and Apollo Range Instrumentation Aircraft, or the ARIA program?

Andonian: The ARIA program, NASA launched that program to help them out on their various [space] vehicles up there. An interesting thing is it [ARIA dome] didn't really change the characteristics of flying the 135 at all. The people that sat up high in their seats could see that dome out there. I never did. But I remember when I started, one of the things they did was put a rack in the back, and when I got onto the program, before they ever mounted one of the domes on there, was that I questioned them about, you know, "What's that back there for?"

"Oh, that's for parachutes."

"Oh. What do you expect, to bail out of this airplane? Where are you going to bail out of it?" You know, and went up, nailed them down.

Actually, when we tested the 135 on test flights, we had minimum crew, we carried parachutes, but we're talking maybe three people, and we got, what, fifteen people back there. And I ran a drill with an airplane on the ground and I had my technical people back there, and, you know, they're going to sit there without their parachutes on, right? So you have an emergency, I briefed them on exactly what we're going to do. I said, "I'm going to ring the bell like we normally would to alert you to bail out. You guys leave your stations, grab your parachutes, and then you're going to have to funnel your way out this front door out here, the entranceway."

And so I rang the bell, and you never saw such a comedy in your life. And the airplane's static. The engine's not running. We're sitting on the ground. They were bumping into each other, putting the parachutes on upside-down, not strapping the buckles, and it was just a mass hysteria trying to get to the exit area. They would have all been killed. And so after that, I taped all that and I showed it to the boss. "Okay, we'll take the parachutes out." And they use that rack back there now for backup equipment, is what they use it for.

And the other thing was NASA wanted us to operate eight airplanes in the Atlantic Ocean, Ascension Island or somewhere, so that we could support some kind of a reentry into that area, and if they missed that target, they were going to land somewhere in the Pacific and they wanted me to pack up all eight airplanes and go out to the Pacific and do a mission. And I said, "No, that won't work. You get into crew rest problems."

So I asked for, and they approved, my taking a 135 around the world on an investigative tour, and I took a NASA doctor with me and some maintenance people and we hit all the bases that we could possibly operate out of around the world, and by the time we even got to Guam, the doctor said none of our crew members was averaging more than four hours of sleep on a given day. And his report was twice as thick as mine when I got back, and they finally agreed that, "Okay, we'll operate four airplanes in the Atlantic and four in the Pacific, and then we'll cover them." So sometimes it took a little bit of talk with the people and it worked, and that's the way they did it.

Kilanowski: You said that the ARIA was a—when you look at the ARIA with that nose dome—

Andonian: No, it had a seven-foot antenna in there, and they used that to do some of their relay work, you know. They could get real-time data that they were getting from the satellite and direct it right down to the ground station. But nowadays they got more sophisticated with the equipment that they do have from various satellites and I guess they're not using—I don't know what they're doing with them now, but when I got out of the program, before I went to Vietnam, so it was like '67, I think they eventually moved the airplanes up to Wright-Patterson and they pooled them all up there. And I don't know if they're still in existence. Maybe you know better than I do. I don't know.

Kilanowski: Well, the ARIAs were still flying in the late seventies, early eighties.

Andonian: Oh, really?

Kilanowski: There was a catastrophic accident out of Wright-Patterson where it was a spouse incentive flight. Are you familiar with that?

Andonian: I'm not, no.

Kilanowski: And many of the members of the squadron and their wives were killed.

Andonian: I think I vaguely remember reading that in *Aviation Week* or something like that. They were taking them up for some kind of a family ride (spouse incentive flight). I don't know what it's all about, but they discouraged that later on, I think. After my time.

Kilanowski: Okay. What was your favorite story about flying the ARIA?

Andonian: I think I already told you. Getting rid of that idea that we could carry parachutes back there. That was ridiculous. And also that the circadian rhythm, you can't just fly seven- or eight-hour time zones and land the airplane, refuel, and go up and do a mission safely. You just can't do that. Even on the U-2 operation, one U-2 mission, young and slim as I was and still am, I'd lose from three to five pounds just losing that liquid out of me. But once we accomplished a mission of seven- or eight-hour duration, you were out of it for three days (crew rest). You didn't fly another mission like that for three days until your body could get recouped and ready to go again. It took a little bit of personal dietary habits and everything else before you went.

Remember, now, [when you are flying the U-2] you're sitting in a pressure suit and you're in a tight little cockpit and you can't move around very much. I preferred the old partial suit to the full pressure suit—we tested some of those in the airplane at the time—because we had a little test switch on our CEP kit, so after three or four hours, you know, you can't move and you want to massage the body a little bit, you push the button and let the suit squeeze you a little bit and maybe lift the helmet off your head a little bit so you can move your head around a little bit. And near the end of the mission, you're doing it about every five or ten minutes. It was a demanding thing.

But the business of pushing the body beyond a twenty-four-hour period and not getting any rest was bad news. I had eleven pilots in the U-2 business, and we'd have maybe two or three pilots at a location on a remote-site thing and we alternated around so that it would be three or four days before you had to fly again. It worked out pretty well. I even utilized a U-2 pilot as my backseat pilot in a B-47 when we had the B-47 to act as a safety chase during our missions, so that rotation worked out great, and so that made me, when I flew the U-2, the B-47 wouldn't be flying, so I flew the missions that didn't require the chase.

But interesting about that—and I don't want to get into other commands and how they operated—my budget was not as big as theirs. When we operated at a remote site, I'd always coordinate with the SAC people and find out if they were going to be operating in that area, like Alaska or somewhere, and I'd ask them if they wouldn't mind getting some extra fuel up there so that I could use fuel for the airplane, and the airplane used extra fuel and that helped us out a lot. But on occasion we'd be at the same site, they're doing their thing and we're doing our thing, and they'd have, like, about fifty-some-odd people take care of one airplane, and I had three. And so as far as being practical and economical, you can see the difference there, but even then, I'd lean on them to get the fuel there for us, and they rode it off beautifully. We had to kind of operate that way.

I remember taking a B-47 to Europe one time, to England, and this program was a contrail suppression program. We introduced some kind of acid into the jet stream, and so it eliminated the contrail. Anyway, while I was there, I had my copilot just go out and see if he could fly some different British airplanes, and I put the British pilots in the front seat and I operated equipment from the backseat. We'd come back, and they're fellow test pilots, okay, so I'd let them shoot some landings with the B-47. By the time we finished the program, we about wore out our tires, and so a nearby airbase utilized by the Strategic Air Command had some B-47s there and they—I called them to say, "I'd like to come over there and have you guys change some of my tires before I go back to the States."

They said, "Oh, sure. Come on over."

So I flew over there, and they not only changed the tires but they gave me a kind of a hundred-dollar inspection on the airplane before we came back. Incidentally, my copilot on that trip was Carl Cross, who was one of the pilots on the B-70, and he lost his life when they lost that airplane. Anyway, so we kind of leaned on each other on these missions that we flew, and it was very helpful.

Kilanowski: I don't think the general public realizes how physically exhausting some of these flights are.

Andonian: Yes. So the people in combat—I don't want to get off track here—sometimes they do things outside the envelope and there's no one else to do it, and when you're in a war situation, there's no alternatives. You go. And I think our country right now is at a point where they're trying to make a decision about bringing our people home. I think, personally, it's a mistake. If they're there, back them up. If you're going to pull them out of there, don't wait till next year, pull them out now.

You can't run a war from Washington, D.C., and I think they tried that in Vietnam and it didn't work, and it's not going to work here. And that's my view on the subject. We've got a mixed group in Washington fighting it right now, and I don't think that—one of the guys this morning on CNN said if we had a demand for something over there, it would take fifteen days before we could get the approval back here to do what

they wanted to do. You can't have that kind of reaction. If you need it tomorrow, that's when you've got to have it, not fifteen days from now. So I think that you can't run it out of Washington, D.C. You put your commanders out there and let them run the show. That's what they're there for. I don't want to get political here, but—

Kilanowski: No, I understand what you're saying. Back to the ARIA, what do you think the greatest outcome was in the ARIA test program?

Andonian: Well, in my participation of it, we were just proving out the systems, making sure that the equipment they put on functioned as it should, and before I helped reach fruition with that thing, I'd already transferred out and went off to fight (in) the Vietnam War and never really got back with the program. When I got back from Vietnam, I went to Wright-Patterson and they didn't have that under their jurisdiction at the time, and so I lost touch with the program. But I think that for that time period, what they did and what they intended to do with the equipment was very beneficial, and they used it for some other activity other than what they initially had programmed it for. That's my understanding of it.

Kilanowski: How did you transfer to flying F-4s in Vietnam?

Andonian: Well, I volunteered. I think if I had waited around for them to call me, I might have ended up in a C-130 outfit or something and I wanted to do fighters, and so I volunteered to go for the F-4 training and go over to Vietnam in F-4s. They bought it, they accepted me for that, and I went to Homestead for my F-4 training, and when I went over to Vietnam, I ferried a flight of F-4s to Vietnam from the States and became the squadron commander of an outfit at Cam Ranh Bay and ended up flying 204 missions. And I love the F-4 because it brought me home from the missions.

Kilanowski: What year did you –[go to Vietnam]

Andonian: Sixty-eight [1968].

Kilanowski: 1968. Had they introduced any of the electronic pods? Were you familiar with any of that?

Andonian: We had some equipment, yes, to detect any surface-to-air missiles coming at us, and on occasion, you know, I wasn't too sure about the reliability of the equipment. They'd trigger and let you know if a site was active, and also it would let you know if they launched anything, supposedly. And the best deal on that, you get a little bit antsy when you get up in a situation like that, but you need time before that missile gets off and really starts heading for you. There's some action we can take with the airplane to avoid it, and on a couple of occasions we had to do that where you just push over real hard, and once a missile picks up velocity, about Mach 4, it can't make the turn with you, so we'd get the missile to pass us up and eventually they would exhaust and come on in and crash on their own country.

But sometimes they would send up a volume of this stuff, and it was very difficult to avoid that, so a lot of our airplanes in the Hanoi area, especially, were shot down as a result, including B-52s and some of the fighters. I never got too far up north, never got up to the Hanoi region.

On one occasion, I was diverted from our original target to help an F-105 pilot who'd been shot down and he'd been in there like twenty-four hours, and we vectored over there and I took my flight in there and we were like number nineteen in a stack of airplanes to peel off and help get this guy out. And we had a helicopter—well, first of all, we had a spotter airplane. An F-100 came in there, forward air controller type, and he spotted the individual and also where the bad people were, enemy, and was directing the traffic that I got involved in to hit the bad people while the helicopters would come in and rescue the pilot.

Right in the middle of all that, they called us all off because a B-52 was coming in, or a flight of B-52s, to make a strike up north, and so we all chased out of there and I got assigned to another target up north. And in the process of lining up our armament, I got a call, and said, "Break it off, break it off. Go back to the RESCAP." So we headed back there and we finally got in there. In the process, they shot down a forward air controller and they hit one of the helicopters, and he barely got back across the DMZ. And we finally got another helicopter in there and got the guy out, but it was a seven-hour-and-fifteen-minute mission, and I had to do three refuelings just to stay in the area and fly all the way back down to Cam Ranh.

But, you know, I thought to myself, "Gee, if I get shot down and they do all this to get me out," it made me feel a little bit better. My thoughts were if I ever got hit, that, you know, all of us were told head for the ocean and bail out over there and then let the Navy come pick us up. But if you got hit and have to land in country somewhere, parachute or otherwise, it was—as you know, we all know that being a prisoner of war in Vietnam wasn't exactly a very healthy thing. So anyway, that was my, let's say, one good experience, being able to get one of our fellow airmen out of there.

I never got hit up north, but I managed to get hit in South Vietnam because the gunners, I think, down there were advised—they learned that if we just point our weapons straight up and keep shooting, you're going to fly right through that and get hit, and that's how I got hit. But I said earlier that the F-4 got me home, and it sure did.

There was one occasion they hit and knocked out on my hydraulics and I had to take the approach end barrier, you know, put the hook down and catch the wire. But once we did that, we had to shut down because we couldn't taxi, we couldn't steer anything. But the rear end of the airplane, the trailing of the wings and the tail section, looked like Swiss cheese, all the bullet holes, but never got the cockpit area, so I'm thankful for that. On three separate occasions I got pretty well hit, but only one occasion when they knocked out the hydraulic where I had to get it back, but I got it back okay and the engine was still functioning, the engines, so, yeah, good airplane.

Kilanowski: My goodness. What do you think the importance of your combat experience was to you when you came back to evaluate other planes? Did it make a difference? Was your perspective different?

Andonian: I thought that my participation in the Vietnam War was that I was thankful that I got selected for the F-4, because it was a good airplane. I trained in a D model, which had some more equipment on it than the C model that I flew over there, and later the E model came out, which was a little bit more aerodynamically a little better airplane, and they had internal guns on it. The C model airplane and the D model, we carried pods on it, a gun pod underneath, and so the effectiveness of the—it was a Gatling gun that fired many, many rounds a second and had more ammo in it. That was one good thing.

But my thinking about how we could have improved, as far as I was concerned, I was in the best equipment you could possibly get at the time. I never encountered any MIG aircraft or enemy aircraft, so I had no air-to-air combat experience over there, and the only air-to-air experience I had was with the missiles that they fired at us, but we knew how to deal with that, long as you could see them coming.

I don't know what to say about how it improved my thinking on it. My thinking was, you know, if we're going to keep on doing this, we need better equipment, such as, like, the F-22 coming along and the F-35. I think the day of the air-to-air combat as we had in Korea and Vietnam and certainly back in World War II, those days are over. It's all going to be a standoff 30 miles or more apart and you never see the guy, you know, and so the capability of the current airplanes like the F-22 that can cruise supersonically without having to go on afterburner, it's going to be one of those get-in-and-get-out situations in a hurry. That would be helpful. But if you're going to be far removed from where they have maybe surface-to-air-equipment, then you're going to be better off, and I think that all of our equipment both in the air and on the ground are getting more sophisticated. So we'd have to have some equipment that can stay far away and still be effective as a combat weapon.

But my thinking is that I'm glad I got to participate in a shooting type of a war where I had a gun to shoot back with them, because during World War II, I flew transports and that kind of equipment where we were exposed to enemy fire and you couldn't do anything about shooting back, and we weren't fast enough to get away from them. You know what I mean? When you're flying something flying under 200 miles an hour, then you can't escape that quick. And some of the routes we flew, you were ripe for shooting at, Southeast Asia and some parts of the China Burma India Theater I was in. So that's why I volunteered to go into fighters in the Vietnam effort, to get a chance to shoot back.

Kilanowski: How were you selected as Chief of Flight Test Operations at Wright-Patterson?

Andonian: When I returned from Vietnam, I thought I was going back to Patrick, you know, with the ARIA birds, because I'd only been there a little over a year and was there

initially to phase in the droop-noses, and, lo and behold, I found I was coming back to Wright-Patterson. What happened was their Chief of Test Ops was going to retire or be transferred or something and my name came up, and I'd been there before, apparently, and they said somebody there wanted me.

I tried real hard to get back—my family and everybody's down in Florida yet, see, and it was going to be a major move and I'm getting near the end of my career. And anyway, I went back to Wright-Patterson, and that's how I got there. I ended up not only as the Chief of Test Ops, I became the Vice Commander of the wing before I retired. But because there was no ultimate goal for me anymore, I retired from Wright-Patterson after I think I was about a year as the Vice Commander, but I enjoyed the flying there.

We were restricted. I don't know if you're aware of the current status of the people that are flying new flight tests. Now I think they're limited to about two different airplanes that they can maintain currency in. In my early days, we had no restriction. We could fly anything, okay? When I was at Wright-Patterson near the end of my career as Chief of Test Ops and also as the Vice Commander, I could fly with any of the people as a kind of a supervisory instructor, if you will. I had my two airplanes. I had the C-135 and the F-4, were the main airplanes that I maintained currency in, and whenever the Standardization and Evaluation Board came around, that's what I took my check rides in.

But I enjoyed the challenge of flying out of Wright-Patterson. When I was there earlier, we were the flight and all-weather testing, and then later they eliminated that requirement, so they didn't too much—a lot of modification testing. I enjoyed the work there, but to answer your question about selection, people get to know you, right? And they said, "We want Harry back here," and that's what happened. I couldn't fight it. [laughter]

Kilanowski: Did you want to comment at all on the testing of the L450?

Andonian: That's interesting too. When I retired, I learned that they needed a test pilot. They didn't say why. I put in an application and I explained what my background was and everything, and I got a call one day from Greenville, Texas, and they wanted to interview me. So they paid for my trip down there and back, and I got down there and they showed me this L450 and I thought, "Wow. What a challenge that is, eh?" A little turboprop engine and glider-like wings on it. And they wanted to check this airplane out to become a drone where they could manipulate it from the ground, you know, take off and land. So they wanted somebody to get in on the testing of the airplane and also of the operators, make sure they could operate the airplane properly to get it up and down and do its mission. That facility does some modification work and overhaul work on C-135s. They had the French Breguet airplane in there. They had several other different airplanes, which as test pilot, I could get to fly those, too, so I thought, okay. I accepted, and that's how I got on the L450.

And later, the military version was the XQM-93A, and that's what we tested out of Edwards. We had two of them, and we lost one, because one night after I checked out

the operators where they could fly it from the ground, they were on like a twenty-four- or twenty-seven-hour mission. In the middle of it, they missed the fact that they lost a generator on the airplane, and so the battery finished up in about forty-five minutes after that, and so when that happened, there's a failsafe in the airplane which automatically puts the airplane into a bank, and it spiraled right on down and crashed.

So we ended up with just the one airplane, and we had some things that we had to test on it out there so that if this happened, then they could cut it out and do that. Like on the ground, if something happened during the takeoff roll, they could cut the power and put the brakes on. And once we ran all those tests, I asked them, you know, the engineer, test pilot thing, you know, I said, "Please disconnect all that stuff now. We don't need that anymore, right?"

"That's right. We don't need it." So they didn't disconnect it.

Sure enough, on our next flight, I'm flying—we're doing landings at the South Base at Edwards and some nosy Air Force pilot with a T-37 wanted to see what's going on down there, and so he banked the airplane sort of coming right into my path and I—we had a trigger on the stick on the XQM. When I hit that, I could disconnect the ground people from running the airplane, and so I'd say, "I've got it." What I would do is I'd hit the trigger and then I'd fly the airplane so I could avoid, you know, any problems. And now I'm about 100 feet in the air right after takeoff and I did that, so I got up and I hit the trigger. It killed the engine, killed my communication, and there I am, I'm dead-stick. I can't talk to anybody, I'm too low to try to relight the engine.

And so right next to South Base (at Edwards AFB) is a barrier test runway and I'm taking off in about a 20 knot wind, and I wasn't very high and I thought, "I'm going to land in the cactus out here." But I saw the runway and I turned around and the wind kind of pushed me back and I landed. The brakes were on the airplane, but they hadn't adjusted them properly. It acted like [unclear] and it brought me to a stop about from here to that door. About 20 feet away from the barrier that was up they were getting ready to do a test, brought me to a stop. So, I really lucked out on that one. But I didn't talk to the engineers for two days.

Kilanowski: Oh, I'm sure not.

Andonian: Today, you know, that's the one thing, is the coordination between the flight test team and the engineer team. Usually the engineers on a bigger airplane go along for the ride, but even then, we have to make sure that, "Hey, what is it you want us to do?" And we qualify that and make sure that we're not going to do something that's going to endanger our lives or the airplane we're flying.

But anyway, they finally disconnected it and showed me how they disconnected it and were very apologetic, but if I'd killed myself, what would they say then, right? Anyway, that's my F-450 story.

Andonian: Okay. This particular test we did at Eglin involved the use of a target being towed behind an F-84, and we could extend that target. It was a wing target, one that we could take off and land behind the tow plane, and on this particular occasion, we were testing the tail guns that would be mounted on a B-47, but we were using a B-29 as the test bed. And we were out over the Gulf of Mexico, out of Eglin Air Force Base during this test mission and we were up at altitude, and I pulled up—I say alongside, far enough away from the B-29 where they could zero in the guns and shoot this target, which was, like I say, 2,500 feet behind my airplane.

So we got up there, and before they started to fire, I had an engine malfunction on the F-84. I had an amber light, and it sounded like maybe I threw some buckets, which turned out to be the case. Some of my [engine] turbine went through the side of the airplane, but the engine was still functioning at a lower RPM, and I said, "Okay, guys, shoot that target off, because I'm going to head for home here." And their guns jammed. And so I said, "Okay, I'm going to get rid of the target," and I couldn't do that. Then I said, "Okay, I'm going to drop the reel from my mount there on the airplane."

"You can't do that. That's the only one we've got."

"I'm sorry." So I hit the release button. It didn't release. So I said, "Okay, I'm going to have to take this thing back and land the target," like we normally did. Now, remember, this is 2,500 [feet] behind me.

So Eglin had at that time two runways, a north-south runway and a southwest-northeast runway, and the big one was the north-south. So I brought the airplane in and landed the target back there, and when a target touches the runway, the nose strut depresses and it releases the cable and it pops the little drag chute up in back of it. That worked fine, and I had enough velocity where I could turn my airplane around and come back around and land on the southwest runway, which I did, and I thought I came in high enough to prevent that cable still hanging back—I couldn't reel it in. It was still back there at 2,500 feet. But I didn't come in high enough, because the cable went across some power lines leading into the city of Valparaiso right near Eglin and, of course, knocked out all their power. But at the same time, it tore a coupling loose about a half a mile down the road, and that coupling swung down, hit the windshield of a big semi truck driving down the highway, and he came to a screeching halt with his airbrakes and everything and the two cars behind him slammed into each other.

And so here I am on the ground now, and I thought, "Man, I got here safely." And my reception committee wasn't very happy. [laughs] They allowed that the hospital was affected. Their emergency power had to come on. It took them some time to restore power for the city of Valparaiso.

Now the B-29. We had this B-29 aircraft which was specially rigged with a trapeze in the bomb bay, which allowed a parasitic type of fighter to be attached to it, and the B-29 could then take off and fly to a remote location near a combat area or something and extend the trapeze, release the fighter, and the fighter could do its mission, come

back. That was the concept. And the fighter could come back and hook up on the trapeze and be pulled back up into the bomb bay, and they'd come on back home.

I had the airplane at Eglin for a special test that we were conducting for our fighters in Korea at the time. This was in the early fifties. We would mount a tank under a big thick aluminum plate on the end of the trapeze and put fuel in there, super-cooled, so we could simulate the airplane up at high altitude and cool the fuel down, and we fired incendiary ammo into that tank. Now, the tank was instrumented up in the cockpit so that we could see if there was any fire as a result of the incendiary ammo, and I don't recall it ever really worked properly. It would tell us it was okay, and, in fact, it wasn't.

The procedure was we'd go to 35,000 feet, do our test, and then I would leave the trapeze extended and use it as a speed brake to get me down in a hurry, and then we'd retract the trapeze and come in and land. Well, all that worked out fine, but when we landed on the first one, first live firing we had, the scanner people called and said there was smoke coming out of the bomb bay, so we quickly turned off the runway onto a taxiway, abandoned the airplane, and the firefighters put out a fire that the fuel tank had ignited after we got down to lower altitude.

So I asked the engineers, "Hey, kind of fix that so we can tell if we've got that fire going. At least we can fly around until it burns out up there." We didn't put that much fuel in that tank, but there was enough that if it combusted to the point where it burst, it could have caused some structural damage, and then we've have to bail out of the airplane. Well, that never happened, of course. We were able to retract the trapeze.

The second time that happened, I said, "Okay, no more testing until you guys fix that."

Well, we tried different fuels and whatnot back there, and the mission completed successfully, but those are the kind of things that in the flight test program it's so important that—these little unknown things can kill you, and it's very important to make sure as you progress through the preparation for the test to make sure that all bets are covered and that we don't leave too much to chance and make sure it's right.

There are more stories I can tell you about Eglin. I was there for over five years, and we had some very, very interesting occasions, but maybe we can save that for another time.

Kilanowski: Okay. Then did you retire from the Air Force and go on then to be an FAA pilot examiner? How did that all happen?

Andonian: Yeah, designated pilot examiner. The way that happened, I was at Greenville working for E-Systems, and I met some FAA people and one of them said, "You know, we don't have an examiner in that area. Next time you're in town, maybe you ought to talk to the leader over here and find out if we can use you up there." So I

took somebody in there one time to give them a check ride in a Viscount. I was the instructor, and the FAA guy rode along with us and we accomplished that.

But when we got back, I went back in the office there and the leader of the examiners for our area, he had a pin chart of the area and he was putting little pins in there, and I said, "What are you doing, Larry?" Larry Ellis is his name.

He said, "Well, these are where my examiners are."

And I said, "Well, I don't see one there for Greenville."
He looked over his shoulder, he said, "You want to be one?"
I said, "Yeah." He put a pin in there.

And then I had to go to school up in Oklahoma City for five days to be indoctrinated as a pilot examiner, and that's how I got in. Nowadays I understand they have to put in an application several pages long and it goes to Washington, D.C., and they're the ones that decide if you're going to be one or not, and they let the people in Oklahoma City know that.

So I've been doing that for, like, twenty-two years now. I enjoy it because I get to deal with these—from private pilot up to airline transport pilot. I can check them all, so I meet a real good cross-section of people, and it's gotten to be very interesting and I look forward to it. After a while, you get to where you can—you may have heard this before, but I can generally tell how a person taxis the airplane, how he's going to fly the airplane, and I haven't been wrong so far. It's good.

I enjoy the work. I have a multiengine check to do on Monday, as a matter of fact, after I get back from this trip. It helps me to keep my hand in, and also the important thing is being able to keep up with the regulations and everything, because I ask the questions of these people and make sure they can answer them properly, so therefore I have to keep up with them, make sure I know what I'm asking them. And in a sense, from the safety angles, it's very good, and I own my own airplane and I fly it under instrument flight rules anytime I go anywhere, so I'm right up with, you know, the newest regs and everything and practice kind of what I preach, what I expect the people to know.

But it's all guided by the FAA and they tell us how we're supposed to do it, and we have what they call practical test standards. It used to be each of us examiners, we kind of did things on our own, had a little pamphlet, it was kind of a guide, but we could change it around a little bit to suit the individual you were testing. But nowadays we all have to go by this one little book, and for each type of test.

And we have periodic meetings, you know, where they keep us up to speed or we feed back some information about, "Maybe we ought to do it this way," or something. I like it because it keeps me real fresh with what I'm trying to do, and long as I can physically pass the tests that I have to pass, not only a physical exam every year but a

flight check. The FAA checks me every year. That's part of the deal. I look forward to that. That means when they come to my place and test me, I buy the sandwiches, and when I go to Dallas and work with them there, they buy the sandwiches. Anyway, I enjoy it.

Kilanowski: That's wonderful. I wanted to ask you what in your flight test career are you most proud of? What do you feel the very best about that you've done?

Andonian: I feel that the opportunity to actually get involved in this flight testing business—and I started, like, seven years before I went to the school [Test Pilot School], and I think my indoctrination into it—maybe I should back up. You remember when the Korean started? 1950, right?

Kilanowski: Yes.

Andonian: I was in the middle of my attendance at an armament school in Colorado, and in June of 1950, the war really started and I thought, "Wow. They're going to probably shorten our course and I'll be off to Korea." They did shorten the course. They knocked off three months and intensified. We went from five days to six days and that kind of thing. I said, "Oh, man. I'm going to Korea."

So September came along of that year, 1950, and they moved me to Eglin. So when I got to Eglin, "What am I doing here?"

They said, "Oh." They checked my flight records and they said, "You've got more flying time than anybody. We're going to make you the operations officer." Well, now, twist my arm. [laughs] So I stayed there, but I helped on a program that supported the war effort in Korea. I didn't get to Korea myself.

But to really answer your question about flight testing and what do I think about it, I'm so happy that in my career I was able to get involved in flight testing. To me, it was the fulfillment of something I wanted to do all my life, not only fly airplanes, but to be able to test them. And so from there to Wright-Patterson to the Test Pilot School to Edwards, which is the mecca for flight testing, I couldn't have planned it better that way, you know. I'm saying it happened that way. You have to be willing and able and pass the tests and whatnot to get there, but I'm thankful that I was able to get in there and do something I've always wanted to do.

Strangely enough, as we age, some of us anyway, I still feel that way. I really honestly feel when the Middle East war started—and I'm not patting myself on the back—I felt like I'm physically capable and went down to the recruiting office and said, "Don't you need some transport pilots?"

And when he [military recruiter] learned how old I was and everything, he said, "Sir, you've done enough. Just stay home. We'll take care of this one."

Kilanowski: They could have used you.

Andonian: Well, I'm sure we could. You take Bill Weaver, SR-71 pilot, got blasted out of an SR-71 at Mach 3-plus and survived, and he's in his late seventies and he's still test flying. And, of course, we're not all like that, nor have the opportunity, but I'm sure that a lot of us older ones that are physically fit, I bet you if you asked every one of them, they'd be willing to go out and do that again, keep on doing it.

Kilanowski: Well, I'll mention that to General Cardenas, because I think he's headed to Washington, and he's also been talking to Senator Duncan Hunter and acting as an advisor to him about what's going on in Iraq now, and that's a wonderful idea.

Andonian: I think it is. I think it is. I mean, they're talking about now extending the careers of commercial airmen, pilots, from sixty to sixty-five years, with a stipulation that one of the front-end people needs to be under age sixty. Interestingly enough, the thing that wags the dog in my activity, I own an airplane and to insure it, each year I have to renew the policy, and each year, because of my age—they don't care about my background or what I'm doing or anything—they either increase the policy or put stipulations in there. At least the one I'm with now, they state that if I carry any passengers in my airplane, for them to be covered with the insurance that I've taken out, I have to have another pilot fly with me who has to have certain credentials. He's got to be so many hours total time and so many hours in the airplane and that kind of thing. Well, I rarely fly with another pilot in my airplane, unless he's an FAA airman giving me a check ride, or they're just going along for the ride, they're not acting as a crew member.

And so I said, "Well, why should I get that insurance if I'm going to have to have another pilot with me?" And so I knocked off that insurance. Why pay the premium if I can't—you know, they're not going to be protected anyway? So anybody flies with me, they're going to have to have their own insurance. I got me a million-dollar liability thing so in case I get in trouble, I can at least fight them with that kind of money.

But that's the way it is nowadays, and the insurance people—by FAA rules, hey, I'm not only flying by the FAA rules, I'm one of their examiners, for heaven sakes, but the insurance people don't recognize that. They're statistical people, you know. They say, "The older guys, you're unsafe," or something. I don't know what it is. But at least the way I feel right now—Guy Townsend's going to be coming here tomorrow morning. You ask him about—he's, what, eighty-six, going to be eighty-seven this year. He's got two airplanes, and one of them is an aerobatic two-wing airplane. He's still doing it. Get him to talk about that.

Kilanowski: Okay.

Andonian: So I'm not saying that all of us are that way. Some, because of physical problems, are grounded and they can't do it. If you can pass your physical and you pass the flight test, so what's to keep you from continuing, you know? I'm not, again, patting myself on the back, but when I fly with people that I give check rides to or some of the

people who are instructors, you know, occasionally they have to renew their instructor ticket, I just wonder about the quality of the people that they're training, because they certainly are not showing me that they are adequate at what they do. And maybe I'm being a little bit too critical, I don't know, because the FAA puts out certain requirements. You have to do this, that, and the other. And they give you tolerances, you know, keep it within so many feet and so many degrees and all that. If you can do that, you pass. If I give an airline transport pilot check, ATP they call it, he has to have at least 1,500 hours, or she, so we're a little bit more demanding, although the requirement still gives them those tolerances, you know. And as I said earlier, I can tell how they taxi the airplane, how they're going to do in the air, and I haven't missed yet. I'm going to keep my fingers crossed.

Kilanowski: [laughs] How are we doing for time? I guess we are about out of time. Is there one other thing that you would like to comment on before we close?

Andonian: Any comment? You mean just out of the blue? How much more time do we have?

Kilanowski: Well, we've got, what—

Kelly: Plenty of tape, just who's out the door.

Kilanowski: Yes, I think we're into Joe's [Colonel Joe Guthrie] time [slot].

Andonian: Well, the only other comment I have, then, is thank you for the interview, and hopefully we can do this again several years down the road to prove my point that age is not a factor. And I'm glad to be a part of this society. To hear the latest developments and some of the work they're doing today, I read periodicals. I get quite a few of those to keep abreast of the process. And while we're on this trip—and one of the people you're going to interview, Jon Beasley, who did the first flight on a production F-35, I'll be very interested in listening to that talk.

Just keeping abreast of all these activities is, to me, a must. You have to keep up with it, and being able to converse with these very people that are doing the current testing, I think that's something I don't want to miss. That's why I attend not only this meeting, the one in Los Angeles, the one in Europe, to hear them all. And, God willing, I want to keep on doing it.

Kilanowski: Well, thank you. Thank you so much.

[End of interview]