Nevada Test Site Oral History Project University of Nevada, Las Vegas

# **Roadrunners Internationale** A-12 Session

October 5, 2005 Las Vegas, Nevada

> Recorded By Mary Palevsky

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Produced by:

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October 5, 2005 in Las Vegas, NV

Panel Participants: Slip Slater, Ken Collins, Dennis Sullivan, Jack Layton, Frank Murphy

[00:00:00] Begin Track 1, Disc 1.

**Hugh "Slip" Slater:** It's a great airplane and we've had a great bunch of guys. We've lost a few, old age and other reasons, but it's really a pleasure to be here and I'll open it up for questions. When you put these active pilots who worked for the CIA [Central Intelligence Agency] and then eventually went back to the [U.S.] Air Force, nowadays they sit back and have a few drinks and tell a lot of stories and you're going to hear a few of them.

I think I should start out with Ken Collins, get him up here, and if you could just ask him questions and then he can open this up and call on anyone.

**Ken Collins:** Thank you. I'd like to say that one of the finest guys in the whole damn program was Slip Slater. [Applause] About two minutes ago, I heard that we were going to be doing this and the talker in the crowd is Frank [Murray], you know. So anyway, whatever we're supposed to do, so if anyone has any questions, here we are.

We can start out a little bit with the selection program for the project pilots—probably started about late sixties, early '61. And nobody really knew who was going to make the program until we all got together and found out the in person. Speaking of the early guys, Bill Skliar, Walt Ray, Lon Walter, and myself were the first four, and then I think later one they come on with Jack Weeks [sp] and Mele Vojvodich and Frank—not Frank, excuse me, Dennis—and Jack [Ronald] Layton and we had two other guys that never stayed with us. We all had the option. If you didn't want to stay with the program, you could elect at any time not to, and Lon Walter elected not to.

It was pretty tough when it first got started. Everything Lockheed [Aircraft Corporation] did, we followed right the next day, and flying that thing was pretty tough. There was a lot of scary moments for every one of us, and I don't think anyone, even the bravest, would deny that. But it was a fantastic, fantastic program, and it was really great to be a part of it.

It was also tough, I think, on the families, and the wives that had to put up with, well, where you going on Monday? Well, I can't tell you [we'd say]. Well, one, you don't know on Friday yet. We did that for five years. Then we started going to Okinawa and they didn't know all of that sort of thing either. But a great program.

One of my very good friends was Mele Vojvodich, and Mele and I were in Korea together at the same time: 1952 to 1953. I'm happy to say that Debbie [Mele's daughter] is here. We haven't seen Debbie in, gee whiz, long time.

OK, any questions?

**Question:** Who has the record for the highest and fastest?

**Ken Collins:** Who has the record for the highest and fastest? Who's going to say who has the record for the highest and fastest? I don't know. I really don't know, and I'm not sure that's ever been officially or unofficially recorded.

[Audience]: Well, they all lie about it. Tell them how you bailed out.

**Ken Collins:** OK. Well, let's see, I was at mach-4 at 100,000 feet. Well, my good friend Jack Weeks was flying, chasing an F-101 and I was on a subsonic engine test. That's before we really got going with the A model or the A-12, really, I guess, going out supersonic. We were doing some things in the trainer, and the trainer is now down in Los **[00:05:00]** Angeles [California] at

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the Science Center. And we were coming back into the weather and started climbing up a little bit and stayed, trying to get out of the weather at about 30,000 feet, I assume, and Jack sort of indicated that he was having a tough time staying with the weather and staying far enough away to watch me and all that sort of thing. So we just signaled that he could move on.

And everything was looking good as far as the instruments were reading. Shortly thereafter, the altimeter started winding down and the air speed went to hell, and all the instruments were just crazy. And I said, this is crazy, and then I look up.

Kelly [Clarence L.] Johnson asked me after the—I stopped him about a week later. He says, What air speed did you see just before it pitched up?

I said, A hundred and two knots.

He says, That's when it pitches up.

It pitched up and went upside down in a flat inverted spin. Insipid spin I think is the correct term. Anyway, you can't recover the aircraft. So I was upside down going around in circles and not knowing what I'll do; whether I was at five feet or five hundred feet or what. But you know, I figured I was over the mountains, I was west of the [Great] Salt Lake, and I figured it was probably time to get out. I was in the weather: clouds. A good time to get out, so I eject. The thing just pops you right out there. I said, I'd never even jumped out of bed in the morning, and that's the first time I'd ever ejected out of an airplane. The seat separates, the chute opens up, and I'm floating down and I'm looking at the ground and seeing where I'll probably land. And the next thing, I think look up, the chute's there. And about two seconds later the chute left. And Jane, my wife, says, Well, did you think of me? I said, No. I said, oh, nuts. I figured that was it. Well, at fifteen thousand feet, working the way it was supposed to work, like the ejection seat did, the main chute came out. That was just the drone chute. That's pretty scary.

I landed, hit the ground, got out of that thing in about two seconds. [In] a few minutes, whatever it was, five minutes, a white pickup truck with two guys in the front come bouncing across the desert and they said, Hey, we'll take you over to your airplane. Jump in. I said, That's an F-105 with a nuclear bomb on it. He said, If you're going with us, you'd better get in. So all four of us was ahead by a canopy, and I threw what stuff I had in the back, jumped in the front with them, and they took me to the Wendover Highway Patrol station. That's where they dropped me off.

Well, anyway, it's all in there. Walt Ray was given the choice or the task of calling Jane and telling her, you know, we're sure that everything's OK, and so Walt's saying, Well, everything's all right, you know. Well, you want me to come over and stay with you and stuff like that?

And Jane says, No, you said he's all right, and that's OK.

He said, Well, we haven't heard from him.

That was Walt.

Anyway, enough of that. Fortunately, and at that time it was rather critical that people—it was an airplane no matter what, but it was critical to the program because the air program was having problems. We just got out there and the first flight was in February of '63 and I ejected on the 24<sup>th</sup> of May 1963.

Anyway, do you have any questions? We'll get some of the other guys up here.

**Dennis Sullivan:** Well, I don't have all those nice stories like Ken or anything else and that sort of thing, but I thought I'd give you just a couple of little plots and a few other things.

Well, Ken talked about hiring the pilots, and I went through the program. There were seven of us in a group of guys that went through all kinds of astronaut physicals and every other darn thing, and psychiatric evaluations. And [they] ended up selecting two out of the seven to go [**00:10:00**] into the program, of which I was fortunate enough to be one. But when I got to the Area [Area 51] and I ran into Ken [Collins] and everybody and got started, getting checked out in the airplane right away. And things went along fairly smoothly because already [they] had gotten—on bail out and had at least some of the problems that we would normally have. But the one point I was going to make is they actually hired eleven guys to fly the airplane from the CIA. Out of those eleven, two were killed in accidents and four just flat quit the program, which reduced it to a very small number of us remaining that actually did most of the flying and stayed with it right to the end. Some interesting numbers there.

There were a lot of little things that happened that I remember working up at the Area. For example, one of my favorite things was to—they ran a rider check every morning in the F-101 to check the cloud cover at the refueling altitude. We refueled at 30,000 feet and wanted to do it under VFR [Visual Flight Rules] conditions if at all possible, so we'd go up and check the weather and decide at what altitude you could do your refueling. So I did that quite a bit.

Also, on one early-morning flight, Bill Park was running a test flight unrefueled early in the morning, and the other thing they would do is chase him with the 101 and he'd get up to about 30,000 feet and accelerate, and those were the signs to get out and go test mach-3. And I was right behind the 101, set to hit the burner, and you know I got to about 1.2-or-3-mach and the black airplane just pulls away. So I'm kind of chasing along there and all of a sudden he makes a really hard—comes out of her, makes the hard 1.8 turn, and then starts descending back towards the Area, and they're going at a big speed and I didn't want to get into too much conversation with them but I said, Problem?

He says, Damned bypass door.

And I thought, well, the F-4 didn't have bypass doors in it, a pump thing for the engines and whatever.

And we got on the ground and I said, What the heck are you talking about? The aft bypass doors don't even come into play until you get up to much higher speeds.

He says, I had to go to the outhouse.

Probably the most expensive trip to an outhouse I've ever seen.

Now, getting back to a little more serious stuff, one question that generally comes up is, you know, flying over—we flew over North Vietnam quite a bit in a pretty safe manner, and they tried to shoot at all of us at one time or another. But one particular mission, I went down there; it was an absolutely clear day. We had flown down there three days in a row and this was the third day, which was very unusual in itself. Now, they're going in-when you come down from the north, you would kind of go around [name of a place in Southeast Asia] and make a turn and then you go across to North Vietnam, and then you go down to around Bangkok [Thailand] and you're doing-backwards and you're a lot heavier on fuel but you do get up to speed. Going in, I had all kinds of activity. You could see a lot of the lights blinking and things that tell you that you're being tracked, the [nolar] signals. Coming the other way, I just knew they were going to shoot at me, so I got the throttles all the way out and kept the speed up and as I'm going across Hanoi and that area, there's nobody, no other airplanes down there, no wild weasels [a type of plane] or anything else like that, and I'm thinking all the fighter guys, around noon, they all go home for lunch. So I'm all alone. And they did fire quite a few missiles and none of them hit me but I could see them going by. And they'd try to come up behind you after they went by, and they would detonate behind you. I ran over a piece about as big as the head of my fingernail. I

still have it. I guess that's the only time anybody got hit and really didn't get it but they just kind of ran over it. But it was kind of an interesting day, so to speak.

One other thing that I recall about the Area, that was on the way, we used to get strangers every once—rarely somebody would try to get up to Area 51 [Nevada Test Site, NTS], and as I recall we had a little white plane charging in there one morning and plumped it on the ground before anybody realized what was going on. So the security guys gathered them up. It was a guy and a gal, they'd been partying all night in Reno, and they talked her into getting on a plane, they headed down to Las Vegas. So they're putting along and they're getting low on fuel and they didn't know where they were and they saw this big airfield over there and he pops it on the ground, and everybody shows up with machine guns and stuff. Well, in the **[00:15:00]** debriefing, they got into the whole story and the gal, she starts saying something to the effect, I knew I shouldn't have gone with you, you son-of-a-gun, and he says, You don't know what the hell you're doing, and she started berating him and hitting him with her purse and they're—and finally a gas cop got them out of there.

But anybody have any questions? I think I've talked long enough over things that I thought I might mention.

**Question:** Can I ask something about flights out of the Area? And that is, I was with the INS [Immigration and Naturalization Service] and whenever you flew out of the Area, did you ever make overflights of target areas? And I think that the closest thing I can think of would be Cuba.

**Dennis Sullivan:** When I started in the Area, we were all trained in test flights. We never actually—the program could fly over targets out of the Area, but I never did. For example, we could've flown over Cuba and places like that very easily. In fact, many of the training flights that I can remember sort of simulated that. For example, I can remember a number of them that

we would go down and you'd be at speed and everything just is very good on flying for Cuba, but then you'd put down, you'd refuel around Key West [Florida], and you'd come back.

I guess one other flight that I can recall that was a little bit different from another standpoint was a rather routine test flight where I went north up towards Seattle and then down the coast and across California and then made a left turn around and back to the Area. And on the way up, it was earlier in the program, I got a big electrical surge and I kicked off the autopilot and flipped everything over and everything's good. So I reengaged and everything and kept on going. And about forty-five minutes down the road, I'm down in Southern California at about 3.3-mach, 83,000-84,000 feet. And all of a sudden I was sitting there and the shadows from the [La Brea] tar pits started moving, shade and sunlight. And I said, what's going on here? I looked at the instruments. Straight and level. The speed's starting to build up. I look out the window, I'm almost in a 90-degree bank. And I kicked off the autopilot and I think I set a new speed record before I got the nose back up and stabilized. What had happened is the instrument system, all the flight instruments that operate on their normal power supply or on your own platform or on the inertial navigation system platform, which is a much more stable system, you get your good instrument readouts. Well, the damn power surge had kicked the inertial nav system out of the battery and the battery went dead and all of a sudden I'm in the negative prebanking conditions. But I'm still here.

**Question:** Many times in a flight test program with the limited number of aircraft, certain aircraft display certain characteristics, some lovable, some not lovable. Were there any of these airframes in the A-12s that had their own personalities or that maybe were the type that when you were assigned to fly it, you'd rather be flying something else?

**Dennis Sullivan:** Well, I never noticed an awful lot of difference between them. I had some that I really liked that seemed to be a little bit more reliable, I guess, but there was not any appreciable difference in any of them, to my knowledge at least. They all worked pretty much as advertised.

#### [Applause]

**Jack Layton:** Since many of you here was in the check-riding program in the Air Force the little bit I know, I know in spite of all that. Some guys made it, anyway. So I'll try and speak up. I got Parkinson's [disease] and it affects my voice, that's why I asked if you could hear me. Can you hear me out **[00:20:00]** there? Yeah, that's better. I'll get a little bit closer to the mike. Did anybody think to bring a roll of duct tape? Tape this arm to my right leg.

We all got a tendency to tell you things that we can't do, whether that's true or not, it doesn't matter. It turns out much of it is true of all of us and it almost makes you want to **[unclear]**, after you're all done with it and you're dying to be done. And with all that, everything's happened. Those early days were—anywhere from—to a glider on a typical mission, and for those of you who don't know what that means—It could be downright hairy; it sounded like six sticks of dynamite going off and all of a sudden the airplane's flying about half sideways, and that just scared one guy out of the program, and I can't understand why. [Laughter] Towards the end, if you lived through [rest unclear].

Well, I guess I could open it to questions. Has anybody got any questions?Question: Yes, I have a question. Time endurances. How long was the longest times for flights?

Jack Layton: Well, Bill Park flew one for twelve hours. I'd gone up prior to that and flew another flight for twelve hours. And we were flying back and forth. He said, Bring it on

home. I said no—little over nine hours—and finally sent the tankers. Sometime not too long after that, Bill Park flew one for twelve hours. I think that was the longest.

Do you have any questions?

**Question:** How were you selected for the program?

Jack Layton: Vern Henderson, are you in here?

**Question:** How were you selected to the program? We wondered about that.

**Jack Layton:** Call on Vern Henderson [sp] because he was the guy that recommended me for this program.

**Question:** He's here.

Jack Layton: I know he's here. I guess he isn't here. Well, anyway.

[Applause]

**Frank Murray:** You'll be sorry you gave me this chance. I'll get even with you. I think Denny and Ken alluded to the order in which people got into the program, the project pilots. And I was in the last of the guys to join the active mission pilots. A guy named Russ Scott who's not around anymore, not with us, and I went through the training, and we were the last ones trained. And Russ quit the program of his own volition. I don't know what the hell happened, but as soon as he got his last training flight done, he quit, and I never did understand that, but I didn't care because I didn't quit.

But Ken suggested that I give a little quick résumé maybe that might be enlightening to somebody here about what a typical overflight mission, how it goes, from the way we organized **[00:25:00]** it and then the way it was done. And let's just pick one of the more typical things we did was North Vietnam. Now first the payload or cameras and stuff we carried down there, for those kind of missions were not very really high-definition cameras. We were more after swath

and coverage, so we carried camera packs that recorded most of the ground action, and a goodsized swath, maybe twenty, thirty miles either side of your path, good enough to identify SAM sights and whether they were occupied and where the airplanes were on the ground and stuff like that.

But a typical mission started about twenty-four hours in advance of the takeoff, when you get the mission alert from the headquarters back in Washington [D.C.]. They'd fire down a thing and it would tell basically when they wanted us to go, where they wanted us to go, and you know that's no big secret there. So the crew or crews, we normally backed up every mission over there. We'd have two guys ready and two airplanes ready, then if one pooped out or something along the line, then the second airplane, the guy was briefed and ready and he picked it up and go.

Like I say, a few hours before the actual takeoff, we'd get into the briefing, go through the details of where they wanted us to go, what special instructions if any there were for that particular day and that particular mission, and of course the rendezvous points for the tankers and whatnot.

Our usual mission, and I think the SR probably did about the same thing later, our usual mission, we'd take off with about half-a-load of fuel because the airplane just couldn't take off with a full load because you'd bust the tires when you rotate for takeoff, the main wheels blow out, and that's no good. So we got in the habit of taking off with about a half-a-load of fuel, flew to a top-off tanker nearby and fill the bird up with fuel, and then leave that and then head on down toward the target area.

The cruise out to the target area, normally you'd go right on out at mach-3 or better, oh, 3.1 or so, something like that, and cruise on down that way. Mission parameters would establish the minimum penetration and altitude, which we always exceeded by 5,000 feet or better. They'd

say minimum, then don't go in unless you can make 75,000. What the hell, you leveled off at seventy-five right after the tanker so, you know, that's no sweat. Probably go down there on one engine.

But anyway, so we always met the minimum altitude and in we went. And like Denny says, sometimes they'd track you and sometimes they'd shoot at you and a whole lot of the time they'd just look at you. And so that was expected and somewhat normal.

Before you penetrated as we called it then "denied territory," you'd go through a built-in test of your jammer system. Remember, this is a single-seat airplane that you're flying there, so you got automated systems on board which you got to test them to make sure that they're going to work when you need them. It's like going fishing without fishing line, you know. You can try holding the bait in your mouth if you want but it isn't going to work real good.

But anyway – sorry, Slip. The devil made me do that. Anyway, on the penetration through on the first flight on a North Vietnam mission, it was really quick. You were just a few minutes over the target area of interest, so you turn the camera on about the time just before you hit the beach, you run it until you had a turn requirement or until they told you to turn the camera off or go standby, and then probably most likely head on down into the area of Southern Thailand for a pickup tanker down there to refuel and get enough fuel, fill it up and get enough fuel to run back over maybe a different track through the same general area on the way home.

So that was the normal thing. So you'd use a top-off tanker and a fill-up tanker after the first pass, and then fly a leg on back and go through with cameras again running wherever they wanted you to do it, and head on home.

Now Denny got shot at a lot because he was bad. They knew. They could see the way he wiggled his wings that he was somebody that was going to be easy to wing, you know, so they tried him. But they didn't shoot at the other guys that much, but he holds the record.

The usual altitude of penetration on those things down there was around eighty [thousand feet]. We normally ran eighty to eighty-two across the target, especially on the leg going in, the **[00:30:00]** first pass, like after coming out of Okinawa we'd fly down and we'd be pretty light, so you could usually get eighty, eighty-two or better, whatever you liked. You want more, push the throttles up. On the second leg coming off the tanker in Thailand, we barely got leveled off and we were heading over the target interest area, so a lot of times we might not be as high as that because you're still fat and still got a lot of gas.

And then fly on home and nothing much to it most of the time, except the weather was crappy. The weather on Okinawa was frequently garbage and so you got to fly in the rain, you know, and do things like that, but it was no big deal. The A-12 is actually a very good instrument airplane and a wonderful-handling airplane. The sports model Blackbird as I called it, not the family model.

So that was a rundown of a typical mission, if anybody wondered what was happening, and most of the time, most of our missions down there were in North Vietnam. We did some little pieces of [the People's Republic of] China—accidentally sometimes—and we also did North Korea. And there was three missions flown over North Korea. Jack Layton flew the last one and I flew the first one. And I don't know who did the middle one.

Audience: Jack Weeks.

**Frank Murray:** Was it Weeks? OK. I didn't know that. Now I am informed. But anyway, I flew a three-pass mission on North Korea right after the [USS] *Pueblo* incident and they had no

clue I was there. None. Three passes. You know, go through, go out, turn around, go back, do it again on another track, and did it three times and they still didn't get the clue, so they were heads-up is what the best description is, I guess. I don't know what they were looking for but they sure weren't looking for the Oxcart. They completely missed it. And we got what we wanted and where the *Pueblo* was and pretty much photographed the whole bloody yard while we were at it.

So that's the story on that. And incidentally I might not have got to fly early on in the A-12 program but I got to fly the last airplane, and that was the last airplane to go into storage in Palmdale [California] in late June of 1968. That airplane now resides in Birmingham, Alabama, and how the hell Alabama got three A-12s beats me. And we don't have one in Nevada.

Anyway, that's my short story. Has anybody got anything to ask or want to say anything or what?

Audience: It's actually Huntsville [Alabama].

**Frank Murray:** No, no, 131 is in Birmingham.

**Question:** How many copies of the A-12 were—?

Frank Murray: It was a dozen.

**Question:** A dozen?

Frank Murray: A dozen airplanes.

**Question:** And how many did we lose?

Frank Murray: We lost—

**Ken Collins:** Mele Vojvodich bailed out of one, if anyone remembers that. He took off and they had a few things wired wrong, and you push the nose down, normally it should go down, you pull it up, normally it goes up, but it was just reversed. He was just accelerating and that thing

started a couple of yazoos like that, you know, and he said, This is not for me, and he punched out. And the chute opened just about the time his feet touched the ground. That was about that close.

Bill Park came in with a flight control hydraulic problem. He was in a big right turn to come in to land. Well, you used to be able to see the runway. And it just started turning on him and he punched out just at about this altitude. And fortunately then, if he had a little bit more, the parachute opened and he touched the ground shortly thereafter.

So I know that one. Mine, Mele's, Jack Weeks, Bill Park, Mowbray's. How many is that? Five? Six?

**Frank Murray:** Park lost two. Bill Park, he lost an A-12 and an M-21. So there was five or six total losses.

**Question:** How many total were built?

Frank Murray: Well, a dozen A-12s.

**Question:** And then how many SRs?

**Frank Murray:** Thirty-one? Two? Six? Thirty-something.

Ken Collins: We lost a few of those.

Audience: But never a life.

**Frank Murray:** No, never a life.

Ken Collins: Not attributed to the airplane.

Audience: Good testing, guys. Good program.

Audience: Never a military life. There was— This lawyer down with Bill Weaver when he went out and when he got his neck—

[00:35:00] Ken Collins: That was the SR-71, yeah. Well, but he got out and the ejection

seat—in fact I just had lunch with Bill a couple weeks ago. The ejection seat worked properly.

Audience: It didn't work. It didn't go out of the aircraft.

Ken Collins: No, no, Bill's didn't, but the guy in the back seat did.

Audience: He went out.

Ken Collins: Bill says so. In fact Bill just wrote an article here last year.

Audience: Yeah, he just broke his pelvis.

Audience: There was a few mistakes in that.

**Frank Murray:** Well, we all have a few mistakes.

**Question:** Did the plane have a beacon?

Frank Murray: A beacon?

**Question:** Yeah. Did you monitor the SAMs' signal?

**Frank Murray:** Yeah, we had what they called the EWS, the electronic warfare system. It was all pilot-managed. Remember, there's only one guy in this thing, so all the chores are done by the one guy. Like a U-2, same idea. But we had a system. The only indicators you had of somebody's evil intent upon you were a system of lights above the drift sight, you know, the scope that you can look down at the ground at and look up at the sun compass and that kind of thing. And there was five lights, wasn't there? UDS, the LIs [Large Image], and the jam dream. I think five lights across the top of the brow, like an eyebrow above the scope, above the drift sight. And the outermost lights, when lit up, said "DF," like direction-finding, and they were relative. If they both came on at the same time, whatever's tracking you and messing with you is more or less ahead of you. OK. And then as you got further in and if they launched at you, the LI lights would come on, the launch indicator lights would say, again, one side or the other or

something ahead of you. Then they had launched. And then when the system staged through automatically to turn on the confusion jammer or a sequence of jammers, then another light would either come on red, which you'd wet your pants, or green, carry on. And before entering denied territory, wherever it was, you always would push down on the EWS panel, push down the built-in test button and hold that down for a little bit, and that would cause these things to go through a built-in test, the BIT switch, and if that went green, proceed, keep going, you don't worry about it. That was it. That was all we had. We didn't have any scopes or anything else that, you know, was fancied up. Later on for the SR, they got a lot more of it and lot better system, but what we had was sufficient at the time.

**Question:** Was it called Starlight or something like that?

Frank Murray: No.

Ken Collins: The SR had the ANS, the astro-inertial navigation system.

**Question:** Was that called Starlight?

Ken Collins: Not that I know of.

**Dennis Sullivan:** Let me throw something in there. I saw quite a number of missiles going by me but the way the camera system worked, when the missile got close to you, you gave it the hard-over flipper signal and it's strong enough to override the guidance signal from the ground, the missile being activated from the ground and it's going right at you until it gets pretty close and then you had enough power to give it a hard-over flipper on the SAM and that would turn it off and it would go spinning. The trouble with that is that if you're sitting here in the cockpit going by and it's being guided properly right up to you, the bomb, as it's getting pretty close, it gets the hard-over flipper and they go sailing by you pretty close, and then you're not that far away. You can see it go by. In fact, another rather annoying thing about it, we had a periscope

where you could look behind you. And one of the things that I found out might not have been a good idea is when they fired quite a few at me that one day, I saw two or three go by me with the hard-over flipper. But then they get out of your jamming signal and they go up over 90,000 feet, and then they come down and while there's still that time of flight, they get and trail you and try to catch up with you, but they can't, and there's no jamming signal back there. But they don't quite get there and what happens is they have a time-of-flight detonator on the warhead, and as it gets to the end of its time of flight of the SAM it just blows up. And so if **[00:40:00]** you're going along and you get a bunch of them like that coming behind you and they're all coming over from 90,000 feet trying to catch you, and you're looking in the rearview periscope, looks like a flak pattern down there shooting at you, you know, *whump, whump, but they're all behind you.* 

**Frank Murray:** Denny had then reached his PMP, which is the point of max pucker. Any other questions of me? OK, we have a few more questions, Slip.

**Question:** Besides North Vietnam, North Korea, and a little bit of China, did we ever overfly anybody else?

### Frank Murray: No.

**Audience:** Frank, tell the story about what you guys did to Mele after his accident when he went to Beale [Air Force Base] for the simulator.

**Frank Murray:** Oh. Well, Mele's accident that Ken covered in some detail was the loss of airplane on takeoff because they crossed the pitch and yaw channels of the SAS. They worked on the bird in the hangar and they accidentally screwed two plugs in on the SAS gyros and cross-connected them, so the thing had no chance of working right. So then they got a hair and said, well, I wonder if other people can fly this airplane, so they loaded up the project pilots and took

them all over to—then Bill Park and maybe of the Lockheed test team took them over to Beale to the simulator and ran all the other guys out of the simulator while they brought he project pilots in to see if anybody could fly this thing with this same condition of the screwed-up SAS, crosswired SAS. And nobody got it but—I don't remember the exact point. Somewhere in there somebody made up a story and said yeah, I handled it easy, and all the rest of the guys didn't, the simulator here, they couldn't do it, and nor could anybody really but one of them, I think it was Park maybe, said, Yeah, I could do that, no problem. And that was a crock.

Anything else?

Question: Hey, Frank, at what air speed do you enter and exit an air refueling, please?Frank Murray: Refueling?

**Question:** Yes, sir.

**Frank Murray:** We refueled at 300 knots and 30,000 [feet], typically. We didn't have to toboggan or go downhill to get gas. We'd just run – SR guys are the same thing – run one engine in AV when you got about half-a-load on you ran out of poo. You didn't have enough power in the military without AV, so you'd run one in mid-AV and let her go at that and get the rest of your gas.

Audience: Talk about the parasail project as well.

**Frank Murray:** Slippery [Slip Slater] was there. They tried to kill us in training, the diabolical thing call parasail training. Somebody got a hair, you know where, and he thought that we ought to learn to do parasail training in a full pressure suit with all the kit on board and everything else, which is really limp. And they tried to kill me, and I know they tried to kill Layton too. Drag you down the beach on your face, you know, and you bust the suit open, yeah, and then get you—goodbye.

## [Applause]

**Hugh "Slip" Slater:** I got to admit Frank had a hell of a time with that parasailing. I went off first and I didn't have any problem, no water in my suit. Dennis went off second and he was bone dry. But from then on it got a little windy and I know Layton was going sideways. He thought he was underwater, still swimming and his face mask was full of water, but he was actually up on top. And it got to where our boys in the little Boston Wheelers couldn't keep up with these guys for their being drug through the water with an inflated chute, so we asked to cancel the whole thing.

**Audience:** Charlie Hervado [sp] was down there, one of the guys in charge of it. He's somewhere around here. Kind of big around guy now.

Audience: This all happened out at Lake Mead.

**Hugh "Slip" Slater:** But you know I want to say one thing about it. There were a lot of hairy things going on up at the Area. We had the greatest flying club in the world, you know, we had the Cessna 210, Ken Collins is taking the doctor up and going to let him check out, and he had to put the gear down on the airplane, and they're on their belly still trying to taxi off the runway, and that sort of thing. We jacked it up and fixed it real quick.

Ken Collins: The brakes were bad.

Hugh "Slip" Slater: Before we went before an accident out there. There's other things about that airplane. It was one of the greatest airplanes in the world. I only flew the SR a couple
[00:45:00] times, but I thought the A-12 felt so much better, so much lighter. It's a lot lighter airplane. They needed a lot more horsepower and they got bigger engines as a result in the SR-71. Now our A-12 would get to altitude quicker, but because the CIA was getting tired of spending money on expensive airplanes when they'd like to be putting their black suits on and,

you know, all that stuff that they did, our program eventually got sold down the river and said we're going to fold it up.

But as our program is in the progress of folding up and we were starting to get rid of people, I got a call and they said, Can we still go on this mission? We had gotten rid of quite a few people. Can we still do a mission? The SR has been asked to do it and they can't do it. We said, We can do it if you give us the priority and get our people back, some of the special, the key people. We got the people back, we went across the ocean in good shape. Mele was the first one over and flew the first mission right on schedule. It worked out fine. We were there just about one year, came back, and of course they put the planes in the graveyard, which was a sad day in most of our lives.

But there were other things that you never hear about, like Dennis made the flight nonstop from Okinawa back to Area 51, and you know that's an all-time speed record. Nobody ever came close to getting across that ocean in that time period. And of course there's no way that you could publicize that sort of thing until the Agency—we wouldn't even say "CIA" actually, but they talk about it now. Many of you have read "The Oxcart Program" which was a wrap-up of our A-12 program, and it was eventually declassified and there's a lot of copies floating around nowadays. If you ever get your hands on it, it's very interesting. But all these guys and Mele and Walt Ray, guys that we've lost or that have passed on since, you know, it was the greatest flying club I ever flew with, and they didn't let me fly very often. I managed. And the experience every one of you would've found so rewarding and certainly none of us will ever forget. And it's our pleasure to be here today, and it was just a small bit of what really went on. Thank you. [Applause]

[00:48:33] End Track 1, Disc 1. [End of session]