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U.S. AIR FORCE ORAL HISTORY INTERVIEW

HONORABLE JOHN L. McLUCAS

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by

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**United States Air Force
Historical Research Center**

**Office of Air Force History
Headquarters USAF**

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AIR FORCE HISTORY AND MUSEUMS PROGRAM

ORAL HISTORY INTERVIEW
OF

HONORABLE JOHN L. McLUCAS

INTERVIEWED BY
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April 10 & May 7, 1996

PLACE:
DR. McLUCAS'S HOME
IN
ALEXANDRIA, VIRGINIA

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BIOGRAPHICAL SKETCH
OF
HONORABLE JOHN L. McLUCAS

John L. McLucas was born on 22 August 1920 in Fayetteville, North Carolina. He graduated from Davidson College in 1941 with a BS in physics, and in 1943 from Tulane University with a MS in physics. In 1950 he received a Ph.D. from Penn State University in physics and a minor in electrical engineering. During World War II he served as an officer in the U.S. Navy including a two year stint at sea in the Pacific theater as Radar Officer, CIC Officer, and Operations Officer. From 1950-1957 he was vice president and technical director of Haller, Raymond and Brown, Inc., an electronics firm. He then served four years (1958-1962) as President of HRB-Singer, Inc. He left private business to serve in government as Deputy Director of Defense Research and Engineering (Tactical Warfare Programs), a position he held for two years. For another two years (1964-1966) he served as Assistant Secretary General of Scientific Affairs at NATO headquarters in Paris, France. In 1966 he returned to private business as President of the MITRE Corporation. Three years later he was back in government serving as Under Secretary of the Air Force from 1969 to 1973 until becoming Secretary of the Air Force in 1973. After two years as air secretary he was appointed by President Gerald Ford to head the FAA, a post he held until 1977. He then returned to COMSAT where he worked for eight years before retiring.

This interview focuses upon the DDR&E and Air Force years of Dr. McLucas's career.

1 Interviewer's note: On March 8, 1996, I sent Dr. McLucas a list of questions which Dr.
2 McLucas responded to in writing in a 25 March 1996 letter. I have listed my questions and
3 Dr. McLucas's answers at the start of the interview. The actual taped interview of April 10
4 and May 7th follows.

5
6 INTERVIEWER: What prompted you to decide to leave the MITRE Corporation to accept
7 appointment as Under Secretary of the Air Force in 1969? What had been your prior experience
8 with the Air Force? Did Secretary Seamans select you to be his Under Secretary? Were you familiar
9 with the Office of the Secretary of the Air Force (OSAF), its history and its organization, prior to
10 becoming Under Secretary?

11 DR. McLUCAS: I was busy enjoying life in Concord, Massachusetts, when the Nixon
12 Administration took office in January 1969. Concord was a pleasant community, and as head of
13 MITRE, I was in the enviable position of corporate leader, local civic activist, officer in my church,
14 and all the rest. I was active in YPO, the Young President's Organization, and had just run a
15 seminar on "What Can the Black Community Expect from the Young President's Organization?"
16 As a result of the success of that seminar, I was asked to head the local chapter of YPO. While
17 contemplating whether to take the assignment on top of a full life, I was asked to come to
18 Washington to discuss the Under Secretary's job.

19 As I said, I was enjoying being a VIP in Concord, but I was not enjoying the continuing
20 civil unrest in the nation brought about by our involvement in Vietnam. As everyone knows, it was
21 a subject of tremendous controversy and was causing me considerable heartburn. As head of
22 MITRE Corporation, I was doing more or less continuous liaison between our company and our
23 sponsors in the Pentagon and at Andrews AFB. We were only three or four miles from Hanscom

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1 AFB, Electronic Systems Division (ESD), and Lincoln Laboratory and were in almost daily contact
2 with one or more of those agencies. I came to Washington at least monthly, and often, more
3 frequently than that, discussing problems with our sponsors and serving on the Air Force Scientific
4 Advisory Board, the Defense Science Board, the Defense Intelligence Agency Advisory Committee,
5 and so on. Running a defense-oriented company and serving on advisory groups was something I
6 had done for twenty years and was very much at home in that environment; in many ways, running
7 MITRE was just more of the same. But I did get quite involved with Vietnam-related activities. As
8 an example, Johnny Foster, the then-current Director of Defense Research & Engineering
9 (DDR&E), was a friend of mine. He called one day to say they were going to build what came to
10 be the McNamara Line in Laos, and he needed a technical person to be put in charge of the
11 development and field installation of that system. Within a few hours I had one of our key
12 engineers, Dave Israel, on a plane, headed for an interview with Johnny. Johnny never let him leave
13 until he had agreed to take the job, move to Washington, and work 'round the clock on the
14 problem; in the process of bringing Dave on board, Johnny talked to our sponsors about our
15 supplying a few dozen MITRE people to support him.

16 Four years before going to MITRE, I had left a company, HRB, where I was president, after
17 building it up from ten engineers in 1950 to several hundred in 1962, to take a job in the Pentagon.
18 I spent two years on the third floor of the Pentagon as a deputy to the DDR&E — at the time,
19 Harold Brown. My job was to oversee development of tactical systems of the three services and the
20 Advanced Research Projects Agency (ARPA). I headed an office called Tactical Warfare. As such,
21 I had spent much time with OSAF officials — Eugene Zuckert, Brockway McMillan, Joe Charyk,
22 Al Flax, among others — and their military counterparts — the Chief [General LeMay] and his
23 deputies, Jim Ferguson, Spike Monmyer, and others. I became a good friend of General Schriever

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1 at Air Force Systems Command (AFSC), and I sympathized with his frustrations on the TFX and
2 CX [which became the C-5]. General Schriever did not like being overruled by the Pentagon
3 civilians on having the TFX built by Boeing; the military had gone through a long source-selection
4 process and had chosen Boeing. At the last minute, the civilians gave the job to General Dynamics
5 (GD) in Texas, home of the Secretary of the Navy and, of course, of LBJ. Various USAF officers
6 were over on the Hill crying about being overruled, and Senator McClellan responded by
7 conducting an investigation of the procurement. About that time, I took the job Harold Brown
8 offered me as head of the Tactical Warfare office. This was the office that would normally have
9 been called on to defend the TFX decision on the Hill. Realizing that the background on the case
10 was pretty complicated for someone new in the building to master in a week or two of fast
11 preparation, Harold Brown asked me if I would mind him assigning the job of testifying to Fred
12 Payne, who was an old hand in the office, was an aero engineer, and had been following the
13 ongoing selection process. I said I would be delighted to have Fred assume the task. I became even
14 more delighted as time went on and I saw the political factors come into play. But my job
15 description meant the task would have been mine had nothing been done to change it. Bennie
16 Schriever called me and said he thought that Boeing would do a much better job on the TFX than
17 GD. He said that one of the main factors being cited for overruling the generals was that Boeing
18 had proposed to use a lot of titanium in the structure; the civilians said that we didn't know how
19 to work titanium into the complicated shapes that aircraft structures required. Schriever said we had
20 already accumulated the necessary experience, but it was on a still-secret project which he would
21 be glad to have me look at; he said he couldn't talk about in on the telephone and suggested I go
22 and see it in the flesh. I said I'd be willing to do that. He said, if you'll be at Andrews AFB
23 tomorrow morning, we'll fly you to where the project is. At 7:30 the next day, I climbed into a

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1 T-39 and soon landed at Beale AFB. They rolled back the hangar doors, and there sat a completely
2 black airplane like nothing I'd ever seen before. It was the F-12 interceptor, or the A-11 Oxcart,
3 later called the SR-71 — an all-titanium structure, proving that we did indeed know how to work
4 titanium. I was impressed and had to sign some papers acknowledging that I would respect the
5 secrecy of this very hush-hush program whose very existence was not recorded anywhere in the
6 public record. But about then, Harold decided to have Fred take responsibility for the TFX
7 testimony, and I never was asked to testify personally. As soon as the testifying was over, I
8 assumed responsibility oversight for the remainder of the TFX program. We went through all kinds
9 of hell as the McNamara decision that all the Services would use the TFX kept falling into disfavor.
10 The Army made the case that the airplane fulfilled no Army need, and it was let off the hook. The
11 Navy needed a new carrier attack airplane, and the TFX was supposed to be the answer. The plane
12 took the name F-111, with the USAF version being the F-111A and the Navy's being the F-111B.
13 The problem was that Fred Korth, the Navy secretary, was the only Navy man who thought the
14 F-111B was a good idea. The Navy fought the decision for five years, and when McNamara left
15 the building in 1967, they finally were able to scuttle it. They then hired Grumman, their favorite
16 contractor, to build the F-14, which looked an awful lot like the F-111 — about the same size and
17 with all the same principal characteristics (high bypass engine, swingwing, etc.) — but it had a
18 Navy nameplate on it!

19 I spent a lot of time visiting various Army, Navy, and USAF facilities and bases getting
20 familiar with the military and its doings. I was very conscientious. We worked on what airplanes
21 would be developed for this and that mission, whether there were airplanes already in the inventory
22 which could be double-hatted, whether aircraft carriers should have nuclear power, and so on. I
23 spent a lot of time working the issue of whether there was an engine suitable for the C-X; there

1 wasn't, but GE finally came in with a design that cut the mustard: it was the TF-39, and it formed
2 the basis for a whole stable of engines which have gone on to fame and fortune.

3 This reminds me of a critical event during my tenure with the Air Force ten years later. We
4 were buying the E-4 Airborne Command Post, and it had a Pratt and Whitney (P&W) engine on
5 it. P&W had supplied all the engines for the B-747 up to that time. Gerhard Neumann of GE came
6 in one day and said we ought to be using his new CF-6. After listening to his pitch, I said okay,
7 but I couldn't spend any money to get a more high-powered engine when the existing one was
8 already big enough to do the job. He said he would take the P&W engines off my hands and give
9 me the upgraded GE engines at no extra cost. I said, "Sold!" We told Boeing to reconfigure the
10 airplane for the GE engine. They did so, and then they went to their commercial customers and said
11 that from now on, they would offer the airplane with either engine at the customer's choice.

12 I spent much time in joint meetings between the Air Force and Navy on the TFX, struggling
13 with a host of issues like weight, landing speed, lift coefficient, and so on. Every few weeks the
14 Navy had another complaint about the airplane and how it just wasn't suited to their mission or
15 their environment, etc.

16 After two years of this, I had fulfilled the obligation I had taken on in my original
17 "contract" and prepared to reenter the "real world"; I looked at various jobs back in private
18 industry. Harold pinned a Distinguished Public Service medal on me and mentioned that there was
19 a job in Paris that he was helping recruit for, and maybe I should take a look at it. He said he was
20 going to Paris the following week and suggested that I ride along, which I did. We flew over to
21 Paris and, to make a long story short, the job appealed to me. Against almost all the advice I got
22 at the time about going out of the country and being forgotten by all my friends here, I went to
23 Paris to work for NATO for two years. It was a great tour, and the family learned a lot about living

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1 in a different culture — albeit not a hardship tour — in Paris.

2 While still with DDR&E, I made a visit to Southeast Asia to see firsthand what some of
3 the needs of the Services were in that theater. This was before the major buildup of forces; Saigon
4 was a rather pleasant place to visit with the women in their bao dais, various officials of the
5 Vietnamese government throwing dinner parties and speaking French, and all the rest. I returned
6 to Vietnam a couple of times later, and of course, each time we were more involved and less sure
7 just when we could wrap it all up. But my life in DDR&E was mostly about developing new
8 weapons for general warfare in Europe, such as a new engine for the C-5, a new tank for the Army,
9 and similar problems, rather than concentrating on Vietnam. We had offices of special warfare
10 working that issue. I remember McNamara announcing in 1965 that we were finally on top of
11 things and there wouldn't be any more bad news. I went off to Paris feeling pretty good about my
12 two years in the Pentagon, where people said I had done a good job; I had certainly learned a lot
13 about the world beyond my experience in a small company in Pennsylvania.

14 This reminds me of an event which preceded my arrival in Washington. Harold had invited
15 me to come to Washington as a deputy in his office, and I was trying to weigh the pros and cons.
16 It occurred to me that Gene Fubini had made a similar transition to what I was being asked to do
17 and that his background was not unlike mine. He had been a key officer in Airborne Instruments
18 Lab on Long Island, which built equipment and performed services very similar to what we did at
19 HRB. He could be a good source of advice, so I called him and arranged a meeting to discuss his
20 decision to go to Washington. I asked specifically whether, when he decided what ought to be done,
21 he felt he had enough authority to accomplish what he wanted to do. He said "John, if you take this
22 job, you will not be authority-limited; you will be wisdom-limited!" He said there will be lots of
23 cases where you will see important factors on both sides of the decision and there will be millions

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1 of dollars riding on the outcome and it will just be very hard to know which is the better way to
2 go. I did take the job, and I did have the troubles he said I would. I've thought about his remark
3 a thousand times since.

4 But on to Paris. I spent two years at NATO Headquarters as the Assistant Secretary General
5 for Scientific Affairs, reporting to an Italian, Manlio Brosio, who had been ambassador in Paris,
6 London, Moscow, and Washington. He was a real gentleman of the old school and a pleasure to
7 work with. I worked closely with the American contingent at NATO headed by Harlan Cleveland,
8 another real gentleman whom I have enjoyed working with ever since. (Ambassador Brosio had a
9 nephew who dated my daughter.) One of my jobs in Paris was to head a committee of defense
10 directors from all NATO countries. Harold Brown was the U.S. member, and I saw him in Paris
11 many times over those two years. Our concerns dealt with the development of common weapons
12 for use among the NATO allies in case of war in Europe. There wasn't much talk about Vietnam
13 in that environment, and of course many of our allies thought the U.S. was spending much too
14 much time and energy worrying about Southeast Asia. In the middle of my tour in Paris, Harold
15 changed jobs, becoming the Secretary of the Air Force.

16 My tour in France was mostly quite pleasant. One of my two jobs was chairing the Science
17 Committee, a committee formed during the only NATO Council meeting of that era where all the
18 heads of state were present. Ike was still president when it was formed, so he was there; I took the
19 job seven years later. We held meetings in various countries, and I visited still more to check up
20 on our projects which we sponsored in all NATO countries. My family took advantage of being in
21 the center of Europe, and every school vacation, I took the family to see yet another part of Europe.
22 The kids blossomed on a prescription of total immersion in French schools, learned to live in a
23 second kind of culture, and generally thrived. My oldest daughter kept up with her class at home

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1 and graduated at the top of her class in absentia! My wife liked it too, or did a good job of making
2 it appear so.

3 My other job was chairing the meetings of the Defense Research Directors Committee on
4 which Harold Brown sat. It took most of my tour to get it working smoothly, but it was a good
5 experience at seeing how much you could get done with allies working together, and how it would
6 be foolish to expect more than was possible. I left with a very good feeling about having taken the
7 job. Contrary to what my friends had said about getting isolated and being out of sight, out of mind,
8 I found that when I looked around for a job, several good alternatives were available. Several were
9 on the west coast in addition to an opening due to the impending retirement of the president of
10 MITRE. In that connection, I was visited in Paris by Jack O'Neill, the head of ESD at Hanscom,
11 and Jim Killian, the chairman of MITRE and also chairman of MIT at the time. I also heard from
12 Harold Brown and Bennie Schriever, both of whom urged me to take the job at MITRE. After
13 looking at various jobs including two in southern California, I took the MITRE position. After
14 making a trip to California to check out two job possibilities, I flew to Boston and landed in the
15 middle of a snowstorm. It made California look especially good to me, but my wife said, "Isn't the
16 snow beautiful?" I took the job in spite of the snow.

17 While living in Paris, although I visited the U.S. a couple of times a year, I was somewhat
18 shielded from the buildup of concern at home about Vietnam; I came back to find that it was much
19 more of an issue than I had known before. There was quite a bit of unrest in the Boston area about
20 the war. Over a period of a year or so, I myself developed rather intense feelings about how the
21 LBJ administration was handling things. By the spring of 1968, I had drafted a letter to Clark
22 Clifford, the Secretary of Defense, and Dean Rusk, the Secretary of State, saying I thought the
23 military should be allowed to fight to win. I described our policy as a no-win situation where we-

1 won't-let-you-win-but-we-won't-let-you-out; that seemed the closest I could come to describing
2 what was going on. As head of MITRE, I saw that I couldn't write a letter as a private citizen
3 without its being taken as the position of the head of MITRE; I was sitting there holding my letter
4 and trying to decide what to do with it when LBJ went on the air to announce he was throwing in
5 the towel and wouldn't stand for reelection in November. I was greatly relieved, not because I knew
6 what would happen next, but because I thought anything would be better than more of the same.

7 I voted for Nixon but was not and have never been active in politics. Nonetheless I was in
8 frequent contact with various people in Washington about how certain jobs (including my old one
9 in DDR&E) would be filled. I helped persuade the parties on both sides that my candidate was the
10 right one for my old position in DDR&E. So I was talking to the recruiters and others about jobs
11 that needed to be filled when Bob Seamans called to ask me to come down and talk about my
12 possible role in the scheme of things. (Eight years later I played a similar role in getting Bill Perry
13 to sell his company and come to the Pentagon as DDR&E. I must add that I had nothing to do with
14 his coming back the second time as deputy to Les Aspin, but I certainly applauded Bill Clinton
15 hiring a person of Bill's background. Bill had been a key member of the Packard Commission on
16 procurement reform and had the ideal background for the number two job on the third floor. I've
17 always been proud that I was his first boss beginning back in 1954 when I hired him as a part-time
18 graduate student at HRB for \$2.50 an hour to work on some math problems on one of our projects.)

19 Bob Seamans told me he wanted to talk to me about the Under Secretary's job and that Mel
20 Laird and Dave Packard also wanted to talk to me about that job and another one. I came down and
21 had good discussions with all three; Mel Laird told me about how the Nixon team would get us out
22 of the war and we could then concentrate on strengthening our defenses against our real enemy, the
23 Soviet Union. Dave Packard told me that he would be my boss on the other job I would have,

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1 because in that job, I would not report through Air Force channels but through him to the Secretary
2 of Defense. The overall package sounded great to me. I was perfectly willing to work for Bob
3 Seamans because he was not only a sound engineer and manager, I also knew him to be a decent
4 human being, a person whom I would be happy to call friend. In addition, he wanted someone to
5 share the work rather than just to mind the store until he could get back to his office. Mel Laird
6 persuaded me that we would not be in Vietnam any longer than it took to "Vietnamize" the war;
7 Dave Packard, whom I'd not met before, turned out to be a really impressive person who looked
8 like he would be fun to work with.

9 I went home and told my wife that I was thinking of changing jobs and returning to
10 Washington. She had just got our new house furnished the way she wanted it and had settled into
11 our very pleasant environment in Concord, an area she loved from her college days at Wellesley
12 (twelve miles away). She thought I was out of my mind, and she was not easily persuaded that I
13 should reenter government. In fact, I never did persuade her; I just went ahead and took the job
14 anyway. Who knows whether I should have listened to her more respectfully and receptively?
15 Taking the job in Washington certainly changed the course of my life, the course of my marriage,
16 and all the rest. On the same side of the argument with my wife was Mel King, a black activist in
17 Boston. When I told him I had decided to go back into government in Washington, he was very
18 upset with me; he said I had sold out. I guess he was hoping I'd stick around and be of some help
19 on some of the problems we had discussed together. That's another piece of unfinished business
20 which I think back on from time to time.

21 When Bob Seamans and I discussed his job offer, we talked about how he saw the job of
22 under secretary. He wanted a true deputy and expected to do a lot of travel, in which case I would
23 run the store when he was away. There are many times when it really screws things up if you just

1 put everything on hold until the big boss returns in a week or whatever. Bob said his background
2 was more in aero and mine was more in electronics, so there would be many projects where he
3 would take the lead and many where he would expect me to take the lead, depending on which
4 discipline was involved. This meant that I would concentrate more on such fields as satellite
5 communications, fire control, and electronic warfare, and he, more on developing some new
6 airplanes. I don't remember whether we discussed RPVs (pilotless airplanes) at that session or not,
7 but we ended up with my taking on that issue too. He said I would have to talk to Mel and Dave
8 about the other job.

9 The "other job" was heading the National Reconnaissance Office (NRO). In the late 1950s
10 there was a highly secret development project going on to develop a reconnaissance satellite to
11 replace the U-2 and SR-71. Those airplanes had been started by the CIA with the Air Force
12 playing a supporting role. AFSC had a large part of the effort as did the Lockheed "Skunk Works."
13 The new satellite was part of a larger Air Force project called WS 117-L — also at Lockheed.
14 Security was such that people were worried that the Russians would be triggered off and there
15 would be hell to pay with them objecting at the UN to the prospect of our overflying them in space.
16 We saw what they did to the U-2 as soon as they got the capability to shoot it down. So it was
17 decided to cancel (ostensibly) that part of the Air Force project and replace it with a weather and
18 science effort. An overt project to continue the visible parts of the job was set up under the name
19 Discoverer as part of WS 117-L. Under Discoverer, we developed power supplies for the satellite,
20 integrated the satellite into the booster rocket, built recovery systems to bring back payloads from
21 space, and so on. From that point, the NRO took over the recce camera part of the job and managed
22 it through a combination of AF and CIA agencies under the name of Corona. The under secretary
23 of the Air Force was the program manager with a CIA deputy. But the name Corona never appeared

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1 on any public document, and the NRO budget never appeared in any public document either. In
2 1960 the Corona had its first successful flight; it was actually the fourteenth attempted flight.
3 Fortunately all the key people involved in the conception of the U-2 knew its life would be limited
4 and started work on the satellite shortly after the first flight of the U-2 in 1955. So when the U-2
5 was shot down in May 1960, we were only three months shy of our first success with Corona.
6 Incidentally, I had been active on WS 117-L in the 1950s when HRB took a small contract from
7 Wright Field to convert some of our airborne elint receivers to operate in a satellite. It was small
8 potatoes, but it allowed us to claim we were active in space-related work.

9 By the time I returned to the Pentagon in 1969, Corona was operating with fairly good
10 reliability and was flying several times a year. I was already up to speed on this because of my
11 service on the DIA Advisory Committee; we would meet periodically and discuss "the take," as it
12 was called, from the overhead flights. As head of the NRO, I was involved in deciding how many
13 Coronas we would have to fly before its replacement was ready (we actually flew the last one in
14 1972). We developed a whole series of improved systems for photoreconnaissance and various
15 systems for signal interception. The NRO has been responsible for some of the most fascinating
16 technical development work anywhere in the country — or in any country, for that matter.

17 So, in answer to the question of why I came to Washington to join the Air Force, I have
18 to say there were several reasons:

19 1) Having begun my Air Force career in 1946 in one of the lowest jobs (a
20 physicist of civil service grade P-2), the idea of taking the number two job had a
21 certain emotional appeal.

22 2) Having served for several years on the DIA Advisory Committee, I was
23 quite familiar with the work of the NRO, and the idea of running that exotic

1 program had enormous appeal.

2 3) And having worked closely with Gene Zuckert and Harold Brown in
3 their roles at the Air Force, I knew the challenges faced by Bob Seamans and his
4 deputy. I welcomed the opportunity to take part of the responsibility for key Air
5 Force decisions and felt I could do at least as well as my predecessors.

6 4) Having begun to feel very frustrated about the way the Vietnam war was
7 being fought, the idea of getting closer to the place where the key decisions were
8 being made and possibly being able to shorten the war myself had a certain appeal.

9 Sitting here in 1996 and seeing the date of 1946 a few lines above, I feel a little like
10 celebrating my 50-year association with the Air Force. Of course, it was the Army Air Forces when
11 I went to work at the Cambridge Research Center, becoming a separate Air Force in September
12 1947. Sheila Widnall held a 50th anniversary for the SAB last year, and at that party, I had only
13 49 years with the Air Force. But her party was premature, with the date being the 50th anniversary
14 of the decision to found the SAB. By the time it actually met, it was 1946 and I was on the payroll,
15 so my 50-year claim is legitimate.

16 INTERVIEWER: How would you describe the policy initiatives of the Nixon
17 administration? What effect did Secretary of Defense Melvin R. Laird have upon the OSAF?

18 DR. McLUCAS: What was new about the Nixon administration? In my view, the main
19 difference was that Nixon et al. said they were in Vietnam only long enough to get out gracefully.
20 Mel Laird impressed me as a man who was strong-willed with a lot of ideas. And he wanted to
21 create a team of senior officials. In McNamara's view, he and his deputy secretary and his staff
22 were hired to put the military departments in their place. He tended to treat the service secretaries
23 like lackeys, except for Harold Brown who had been a member of his staff for four years before

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1 he took the Air Force job. Zuckert didn't like to come to work as soon as McNamara did. The
2 rumor was that he usually had to dress in his limo on the way to the Pentagon; it was a federal
3 offense to keep McNamara waiting when he called to ask you to come to his office at 7:00 A.M.
4 When Admiral McDonald became Chief of Naval Operations (CNO), he never adapted to
5 McNamara's rules that you were supposed to live at the pleasure of the Secretary of Defense.
6 Admiral McDonald thought you should get your work done in an eight-hour day, and if you didn't,
7 it meant you weren't properly organized. McNamara stripped him of that arcane idea.

8 People criticized Nixon for not having a plan to get out of Vietnam, but he seemed to have
9 a stronger intention to get out than LBJ did, so it was better than the alternative of dragging things
10 out. Unfortunately, it took almost four years to really stop the war, with our getting out in 1973.
11 Bob Seamans left the building in May of that year. I became secretary just as the war ended, so my
12 tour in the top job consisted of our attempts to salvage an Air Force from the wreckage caused by
13 loss of equipment, of morale, and of the feeling the Air Force had always held that if there was a
14 job to be done, we could do it. We tried to rebuild the morale and get a start on a few new projects.
15 The most important new specific development we brought to completion on my watch was the
16 YF-16/YF-17 flyoff, the selection of the F-16 as a major component of Air Force equipage and
17 its sale to NATO. The F-15 development was pretty near completion when Bob Seamans left. In
18 my view the F-15 and F-16 showed that if you did a good job of design and test, you could avoid
19 fiascos like the C-5 and F-111 — two programs started by our predecessors who were so smart
20 they didn't need to do prototypes but could go into production on fixed-price contracts for airplanes
21 that were far from straightforward follow-ons to previous work. The wings fell off both of them;
22 we had to build a new wingbox for the F-111 and a whole new wing for the C-5. We spent a lot
23 of money and effort salvaging those programs.

1 INTERVIEWER: What was Secretary Laird's effect on the Air Force?

2 DR. McLUCAS: Mel saw himself as a team builder. He left the building in 1973, so he has
3 been gone now for 23 years. During that time, his troops have organized a number of alumni
4 meetings. Our team was called the Laird-Packard team, and I think we all felt our team was real.
5 Mel set up weekly meetings with the secretary and under secretary of each service; if either was
6 away, the other would come alone. He also had a weekly meeting with the three service secretaries
7 together; if the secretary was away, the under secretary would replace him at the meeting. It would
8 be hard to imagine McNamara holding such meetings. When Jim Schlesinger became Secretary of
9 Defense, I suggested we continue the meetings Laird had convened with the three service
10 secretaries. He asked me what I thought they could possibly have to talk about; the meetings never
11 occurred.

12 Mel also had a weekly staff meeting where he called on his staff to update the group on
13 various events and requirements for reports and so on. Mel was very proud of his ability to work
14 the Hill; he spent a lot of time walking the halls of Congress and rounding up support. He used to
15 brag that he never lost a vote on the Hill. He had his own set of rules about the White House. We
16 would get calls from the White House and our tendency was to respond. After that happened a few
17 times, he said at staff meeting that we weren't supposed to do anything when the White House
18 called except to refer the caller to Carl Wallace, his personal assistant. I always found Mel very
19 supportive, but he was highly critical when something didn't go the way he thought it should.

20 One day he called me and asked me to come down to his office. When I arrived, he asked
21 me to tell him what the Air Force had ever done right by way of program completion. He said he
22 was hearing that the Air Force had a way of screwing things up and he'd like a list of developments
23 that had gone right. I went back to the office and started trying to find something that had gone

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1 right. It took a long time; I finally went back and said that the only program I could find was the
2 C-141. That airplane had come in on time at the stated price and was working well in the field.
3 Later we had a number of successes, and by the time he left the building, he had changed his tune.
4 At departure ceremonies for me, and I think for Bob Seamans as well, he gave the Air Force credit
5 for having more successes than any other service. He said that now when someone asks which
6 service does the best job, he always answers, "Air Force."

7 INTERVIEWER: Did you have a planned agenda that you hoped to concentrate upon when
8 becoming Under Secretary of the Air Force?

9 DR. McLUCAS: I had an agenda related to airplane development. A school of thought had
10 grown up under McNamara that prototyping had gotten so expensive that it was no longer
11 affordable. I felt that the cost of prototyping was not the issue; the reason for prototyping was to
12 avoid the huge blunders we had experienced in cases where no prototyping had occurred. I believed
13 we couldn't afford *not* to do prototyping. It turned out that Dave Packard and Bob Seamans felt
14 pretty much the same way, so I was preaching to the choir. The lightweight fighter was probably
15 the best example of a pure prototype, but we applied the prototype philosophy to the F-15 also.
16 That is, we built only a few airplanes and subjected them to full-life tests before clearing them for
17 production, or even for full-scale development. It cost money to do it, but the process resulted in
18 highly successful airplanes which now have twenty years of outstanding performance under their
19 belts.

20 INTERVIEWER: What areas did you eventually focus upon, and were they of your
21 choosing or were they assigned to you by Secretary Seamans when you became Under Secretary
22 of the Air Force?

23 DR. McLUCAS: Bob Seamans and I agreed mutually on what areas he would work and

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1 what areas I would work, but we weren't saying that if A got airplanes, B wouldn't make any
2 contribution, and the same for satellites. For example, I worked the issue of locking up weapons
3 on the B-52s. When I came in and found there were no locks on nukes, I started pressuring John
4 Meyer and got them locked. It took some time for people to accept the idea, but they came around.

5 INTERVIEWER: Did you want to lead the NRO? Did this assignment interfere with other
6 OSAF duties? Did you retain control over the NRO when you became Secretary of the Air Force?

7 DR. McLUCAS: Yes, I wanted to lead the NRO but, as I said earlier above, that was not
8 something that had to be negotiated with Dr. Seamans. During Harold Brown's tour as SAFOS, Al
9 Flax had the responsibility reporting to Deputy Secretary of Defense.

10 Did NRO work interfere with USAF work? I split my time more or less 50-50 between the
11 two assignments. There were times when I was totally involved with the NRO, but it wasn't
12 common, so I would say that was not a big problem.

13 I maintained control of the NRO after I became SAFOS for a few months. At first, I was
14 acting secretary beginning in May 1973, so it wasn't feasible to turn the NRO work over to
15 someone else. Only when I actually became secretary in July was that an option. I immediately
16 started recruiting, and I believe I had hired Jim Plummer by late fall.

17 INTERVIEWER: Were you pleased with the organization of the OSAF? Did you ever
18 recommend any changes as Under Secretary or as Secretary?

19 DR. McLUCAS: I don't remember trying to change the organization. The only friction I
20 experienced was minor. Phil Whittaker didn't take kindly to meeting with me to discuss USAF
21 issues when we first started working together; perhaps he thought I was trying to insert myself
22 between him and the secretary. I had no such intention; I merely wanted to keep the ball rolling,
23 so I never took offense at his attitude, and I hope he didn't either.

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1 INTERVIEWER: How involved did you become with Vietnam war issues?

2 DR. McLUCAS: As National Reconnaissance Office (NRO) director, I had some
3 involvement in the sense that Vietnam was one more target area for us. But our main concerns there
4 were the USSR and China, with Vietnam getting little attention. I did work some communications
5 issues and was involved in the gunship business as backup to Dr. Seamans.

6 INTERVIEWER: Who were some of the most memorable people you dealt with during
7 your tenure as Under Secretary and Air Secretary?

8 DR. McLUCAS: Of course the heaviest involvement was with those close by — Laird,
9 Packard, Seamans, John Chaffee, John Warner, Stan Resor, Johnny Foster, Mal Currie, Dick Helms,
10 Jim Fletcher, Jim Schlesinger at OMB. Bozo McKee, and Jack Shaffer at FAA. I remember well
11 some of the people I had to testify before, such as John Stennis, Eddie Hebert, George Mahon, and
12 Bill Proxmire. I had good interactions with university types like Jim Killian, Howard Johnson, Jerry
13 Dinneen, Walt Roberts, and Doc Draper. I enjoyed very much working with industry people like
14 T. Wilson at Boeing, Din Land at Polaroid, Tom Jones at Northrop, Sandy McDonnell at McDAC,
15 Gerhard Neumann at GE, Allen Puckett and Bud Wheelon at Hughes, Si Ramo and Rube Mettler
16 at TRW, Ed Uhl at Fairchild, and Irv Kessler at RCA.

17 INTERVIEWER: You worked with four Air Force Chiefs of Staff, John P. McConnell
18 (February 1, 1965–July 31, 1969), John D. Ryan (August 1, 1969–July 31, 1973), George S. Brown
19 (August 1, 1973–June 30, 1974), and David C. Jones (July 1, 1974–June 20, 1978). What can you
20 remember about your relationship with these Chiefs? Can you recall their relationship with the
21 OSAF? How did the Air Staff and the OSAF relate during the tenures of each of these Chiefs?

22 DR. McLUCAS: CSAFs. As the dates show, I did not work long with J.P. McConnell and
23 I would say it was not especially a good or bad relationship. I did work well with Sally McConnell

1 on wives' issues. During those early days, I had an excellent relationship with John Meyer, and I
2 think he felt so too, Jack Ryan and I worked well together. He was a man of few words and I could
3 never understand why; when he spoke, he usually had something worthwhile to say, but it was
4 almost like pulling teeth to get him to talk. He didn't change when he retired; he said nothing at
5 his retirement ceremony, very few words at the White House when President Nixon pinned a medal
6 on him (the day before Nixon's resignation). When Jack would return for some kind of reunion,
7 he still didn't say much — including describing the state of his health. I later decided that he must
8 have known all along that he wasn't going to live long, and perhaps that explained his taciturn
9 nature. He was quite nervous when we talked at lunch (we had lunch together frequently for
10 business purposes). I would often notice that the whole table was shaking from his legs doing a fast
11 motion beneath.

12 I would say my attitudes toward the chiefs were very much related to what I thought of
13 their with-it-ness. I never got close to J.P. I thought I got as close to Jack as was possible for an
14 "outsider" to do, and we worked together quite well. I remember one day the subject of the Navy
15 brass and the Navy secretary came up, and then the Army too. He said that neither service was
16 used to having much interchange between the civilian side and the military side. I said that all I
17 knew was that in the Air Force, there was a lot of interaction. He said he agreed but that it was not
18 necessarily because the military wanted it that way. I made the point that the civilians could be of
19 great help to the military in getting support on the Hill, etc. He allowed that that was true but said
20 the military sometimes got more interaction than they really wanted.

21 George Brown was, in my view, a great chief. He was a great role model for his own troops
22 and worked smoothly with the civilian side. He and I used to go to the Hill together to testify. It
23 began because of timing, and my tenure as secretary starting in the summer, that he and I were up

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1 for confirmation at the same time in July 1973. With John Stennis in the hospital with gunshot
2 wounds, Stuart Symington ran the hearings. First, George and I visited Senator Stennis at Walter
3 Reed. It was like a love-in. The senator felt he knew both of us well and it showed. It didn't hurt
4 any that he had shared a vacation spot with me one summer, courtesy to the Air Force. Then the
5 Symington hearing went swimmingly. George and I decided that we made a pretty good team, so
6 we started going over to the Hill together without the usual retinue trailing behind us. I remember
7 George Mahon asking one day why we had no one with us. I said I thought the kinds of questions
8 he would ask were ones we ought to know the answers to; it was only the petty details where we
9 would need backup. He seemed happy with that response, so we kept doing it. Of course that was
10 not the only way we went over, but it does illustrate something. I felt George Brown and I were
11 quite sympatico. I admired his wife, Skip, and worked well with her too.

12 After a year, he got promoted to Chairman, JCS, and Dave Jones came in. Jim Schlesinger
13 and I had no trouble agreeing that Dave was the right man for the job. Dave and I had a good
14 relationship, and I think we worked well together, but we were never as close as George and I were.
15 Dave was more concerned about his relationship with the Secretary of Defense and wanted to
16 succeed George as chairman.

17 Dave was a quite forward-looking man. When I was under secretary, Mel appointed me a
18 special assistant for civic affairs. As such I dealt with the services on what programs they would
19 do to build better relations with the local communities where service families lived. In that role I
20 dealt with Dave Jones. At the time, he had something like the Second Air Force reporting to him
21 and had a number of "civic action" programs which sounded pretty interesting. I asked him what
22 we in the Pentagon could do to facilitate that work. He said "Just get out of our way!" That was
23 Dave Jones, all right. But he was a doer and got a lot done.