

SJR

3

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX



During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX

Senator Loren Lemman

“F-22 Raptor Aircraft At Elmendorf AFB” Witness list

Thursday 1/25/01
3:30 p.m.

Senator Loren Lemman Sponsor	(907)465-2095	Juneau
Lt. Col. Burton Wiggins	Chief of F-22 Weapons System Requirements Langley AFB, Virginia. (757)764-4480	Offnet
Lt. Col. Larry Jones	Chief of Weapons System Requirements Elmendorf AFB, Alaska. (907)552-3008.	Offnet
John Joeright	UAS Intern with Senator Loren Lemman (907)465-3841	Juneau

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX

During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX



Senator Loren Leman

Sponsor Statement – Senate Joint Resolution 3

“F-22 RAPTOR AIRCRAFT AT ELMENDORF AFB”

SJR3 encourages the United States Air Force to select Elmendorf Air Force Base for deployment of the F-22 Raptor. This aircraft will complement existing defense capabilities and significantly boost Alaska’s economy. Deployment of the Raptors at Elmendorf will pump \$150 million to \$300 million into the Alaska economy during the construction phase and will add 846 new personnel to the deployment area over a three-year period.

The state-of-the-art Raptors will replace two squadrons of the Air Force’s aging F15C aircraft as the world’s top front line fighter plane.

An Alaska deployment puts the world’s top fighter aircraft on a forward base at one of the most strategic locations in North America and complements the U.S. military’s first strike capabilities.

If Elmendorf AFB receives the three Raptor squadrons, one squadron of F15E’s will remain on base full time, along with some F-15C’s for the winter months.

**Prepared by John Joeright, Legislative intern to Senator Loren Leman, (465-3841)
Last updated January 12, 2001)**



During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX

During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX



Senator Loren Leman

Senate Joint Resolution 3 "F-22 Raptor Aircraft At Elmendorf AFB"

- ◆ **Economic Advantages for Alaska**
Deployment of the F-22 Raptor at Elmendorf Air Force Base will significantly boost Alaska's economy. The construction phase will generate \$150 million to \$300 million into Alaska's economy and create 846 jobs over a three-year period. Three Raptor squadrons would be permanently based at Elmendorf, including long term support personnel.

- ◆ **Strategic Advantages for Alaska**
The Raptor would replace two squadrons of aging F15C's at Elmendorf. The new aircraft will give the United States clear air superiority to combat lethal threats from foreign surface-to-air-missile systems and next generation fighters.

- ◆ **Stealth Technology**
The Raptor's can "supercruise" at Mach 1.5 without the use of after burners, minimizing acoustic detection and decreasing vulnerability from hostile, heat-seeking or jet wake detection devices. Its design will minimize air turbulence detection, visual detection and the incorporation of curved surfaces with "radar energy soaking" coatings will shrink its radar image.

- ◆ **State of The Art Technology Assures Control of The Skies**
The F-22 is designed for air dominance, enabling U.S. and friendly forces to win quickly and decisively with few casualties. Fitted with AIM-9M Sidewinder and AIM-120 AMRAAM missiles at mid fuselage and an internal M61A2 Vulcan 20 mm cannon as well as an LAU-141/A launcher, the aircraft has multi-mission capabilities. The capability to detect and destroy targets at long range, the F-22's unmatched dog fighting enhancements, air to ground capability and Block 3.0 avionics software make the aircraft superior to any fighter in the world. The Block 3.0 software for the first time, integrates all aircraft system software into one cockpit display for information exploitation.

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX

During Interim, June - December:
716 W 4th Ave. Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX



Senator Loren Leman

F-22 Chronology of Events

November 1981

Air Force identifies a need for an advanced fighter to replace the F-15

May 1983

Pratt and Whitney initiates design of the PW5000. Which is later designated f119.

November 1985

The Air Force issues more stringent stealth goals for the Advanced Tactical Fighter designs.

September 1986

Assembly begins on the first YP⁷-119-PW-100 engine It would begin testing the following month.

July 13, 1987

Team initiates new YF-22 configuration design and development.

July 17, 1987

Initial Tests are carried out on the YF-22's avionics system on the team's airborne Flying laboratory, a Boeing 757

January 13, 1990

Final assembly of the first YF-22 prototype begins in California.

September 29, 1990

First flight of prototype. Dan Ferguson was the pilot.

October 25, 1990

Maj. Mark Shackelford becomes the first Air Force pilot to fly the prototype. It is also the first time the aircraft is flown at supersonic speeds.

November 3, 1990

The F-22's ability to "super-cruise" at supersonic speeds without the use of afterburners is demonstrated for the first time.

November 28, 1990

First live missile firing at China Lake California.

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX



During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX

Senator Loren Leman

April 22, 1991

Air Force Secretary Dr. Donald Rice announces that declining defense budgets will reduce the number of Advanced Tactical Fighters.

December 8, 1992

The first part of the flyable F-22 is made.

Summer 1995

Wind Tunnel testing of aircraft are conducted

April 9, 1997

Aircraft is unveiled at Marietta Georgia and christened the "Raptor."

August 4, 1998

Aircraft 4001 in-flight refueling at 30,000 feet, 300 knots.

November 23, 1998

The first Block 1 integrated production software was released to the flying test bed.

January 12, 1999

A new MiG fighter jet, conceived as a Russian response to the U.S. combat aircraft was unveiled. The multi functional fighter, known as project 1.42 in the West, is proclaimed by the MAPO-MiG company that produces it, to be able to outperform the F-22 Raptor.

December 8, 1999

Air Force sees minimal impact on F-22 from congressional cuts.

October 31, 2000

Raytheon's AMRAAM successfully launched from F-22 Raptor

November 3, 2000

F-22 Engine completes qualification test milestone for initial service release. .

January 5, 2001

Raptor Achieves Key Program Criteria – First flight of Raptor 4005 armed with block 3.0 avionics.

January 22, 2001

President Bush's transition team announced it would commit to the F-22 Raptor if the Pentagon agrees to scrap the \$250 Billion Joint Strike Fighter.

The Washington Times

ELECTION SPECIAL
The Washington Times
PRESIDENT BUSH

FINAL EDITION
Wednesday, November 8th, 2000

Click Intern
Advertisi

SITE SEARCH

CLASSIFIEDS | ARCHIVES | SUBSCRIBE | CONTACT US | ABOUT TWT

BREAKIN

SEARCH

DAILY

- Front Page
- Nation/Politics
- Election 2000
- World
- Commentary
- Opinion/Editorial
- Metropolitan
- Sports
- Business
- Technology
- Entertainment
- Culture
- Weather

WEEKLY

- Business Times
- Family Times
- Auto Weekend
- Home Guide
- Arts
- Access Magazine
- Nat'l Weekly Edition

MARKETPLACE

- Classifieds
- Business Directory
- Int'l Special Reports
- Advertiser Index

January 22, 2001

Pentagon considers cuts in major weapons systems

By Rowan Scarborough
THE WASHINGTON TIMES

Incoming Pentagon officials have already begun discussing options for killing or curtailing major weapons systems, with the Joint Strike Fighter mentioned as a possible casualty, defense officials say.

The sources said Defense Secretary Donald Rumsfeld's transition team has sent "feelers" to Capitol Hill to gauge political opposition to canceling systems that create jobs in a number of states.

"The Bush team is being very smart," said one source close to the transition team. "They are seeking congressional advice as they talk through some of these programs. They are discreetly planting seeds and looking at alternatives."

In tentative discussions, Pentagon officials have broached the idea of killing the \$250 billion Joint Strike Fighter (JSF), a multipurpose jet designed for the Air Force, Marine Corps and Navy. In return for the military branches' agreement, the Bush team would "make commitments" to the Marines' V-22 Osprey, the Navy's F-18 Super Hornet and the Air Force's F-22 Raptor stealth fighter, one source said.

Another option being discussed is to delay production of the Navy's DD-21 stealth destroyer and redesign it for theater ballistic missile defense.

"There are discussions ongoing, but no decision has been made," the Defense source said.

Mr. Rumsfeld will present his first budget in February, for fiscal 2002, largely based on service request made during the Clinton administration's final year in office. But he will augment the request this spring, and sources say he would like to make a bold statement about his vision for the 1.37 million-member armed forces.

Top Stories

- Democrat signs on to Bush's plan
- Area's prelate chosen as cardinal
- Busy agenda replaces glow of celebration
- Was a pardon a quid pro quo?
- Agenda items get a boost
- Cops clear bleachers to seat protesters

Updated at 5

- Escapes I Colorado
- Bush To B Funds
- Assassin o Evers Dies
- Clinton No Citizen
- Calif. Face Shortages

The Washi
ELEC
COLLE

The sch
Now on The W
Home C

Get
RO

Mr. Rumsfeld, who won Senate confirmation on Saturday, has marching orders from President Bush to cancel some programs so the Pentagon may invest in tomorrow's weapons that promise to change the way wars are fought.

In his campaign's major speech on defense policy at The Citadel in September, Mr. Bush spoke of a "window of opportunity" that will allow the Pentagon to put money into technologies such as unmanned aircraft, light armor and the "arsenal ship," a stealthy vessel armed with long-range land-attack missiles.

"The real goal is to move beyond marginal improvements, to replace existing programs with new technologies and strategies," Mr. Bush said. "To use this window of opportunity [is] to skip a generation of technology. This will require spending more and spending more wisely," he said.

On the table is nearly a half-trillion dollars in major weapons procurements. The problem for Mr. Bush is that each has a constituency of lawmakers, defense industry lobbyists and unions. The potential opposition is the reason the administration already is sending feelers to Congress.

"You've got a bit of 'Nixon goes to China,' " said Ivan Eland, a military analyst at the Cato Institute. "Bush is a Republican, and Republicans have the reputation of being stronger on defense. It may, in fact, be easier for him to cut weapons systems that aren't needed."

There are at least seven major procurements that Mr. Rumsfeld will scrutinize as part of a far-reaching review Mr. Bush wants. The defense secretary, who boasts a 25-year record of corporate innovation, will look at developing weapons, force structures, foreign deployments and the procurement process itself.

The systems most likely to get a close look: the Navy's DD21 stealth destroyer, the Joint Strike Fighter, the Air Force F-22 stealth fighter, the Navy F-18 Super Hornet, the Marine Corps V-22 Osprey, the Army's Crusader artillery piece and the Comanche scout/light attack helicopter.

All told, the systems' long-range price tags top \$475 billion.

"We need to guard against the perception that anything that is good for the defense industry is good for the troops," Mr. Eland said. "If Bush invests in training, quality of life and [research and development] for the future, that's good for the troops."

The Pentagon took a "procurement holiday" the past decade as its overall budget shrank to help wipe out the federal deficit. The decline, coupled with unprecedented

wear and tear on equipment, has left an aging force. The Marines are still flying Vietnam-era helicopters. The average age of Air Force fighters is approaching 15 years.

The question arises: How can Bush-Rumsfeld modernize the force but kill some of the systems meant to replace old equipment?

John Hillen, a defense adviser to the Bush campaign, contends there is no way the Pentagon can modernize properly without killing some current systems.

"In my personal opinion, I do not see how you can continue to acquire the current upgrades on legacy systems such as the F-22 and Joint Strike Fighter while at the same time transforming the force with leap-ahead technologies," Mr. Hillen said.

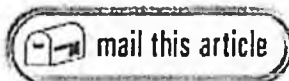
"There is simply not enough money, not even close, even with extravagant budget increases. In other words, a true transformation is going to require some hard choices when it comes to current programs in the pipeline over the next 10 years."

In his speech at The Citadel, Mr. Bush said he planned to buy some new weapons "necessary for current tasks." But the most important part of his plan will be to "replace existing programs with new technologies."

The rub will come if Mr. Bush asks Congress to affirm his decision to discard major programs. The F-22, for example, has the strong backing of lawmakers from Georgia, where Lockheed-Martin is assembling the first planes. A good share of DD-21 destroyers likely would be built in Mississippi, home state of Senate Majority Leader Trent Lott. Mr. Lott is arguing for a bigger shipbuilding budget now, not 10 years down the road.

"I think it will be fascinating," a congressional defense aide said. "It will tell you who's running the Pentagon: Rumsfeld or the Joint Chiefs. Let's say they kill the V-22 and they make that recommendation to Congress. The Marines come over in the back door and say, 'Don't pay any attention.' If Rumsfeld doesn't have their heads on a platter, it's clear who's running the Pentagon."

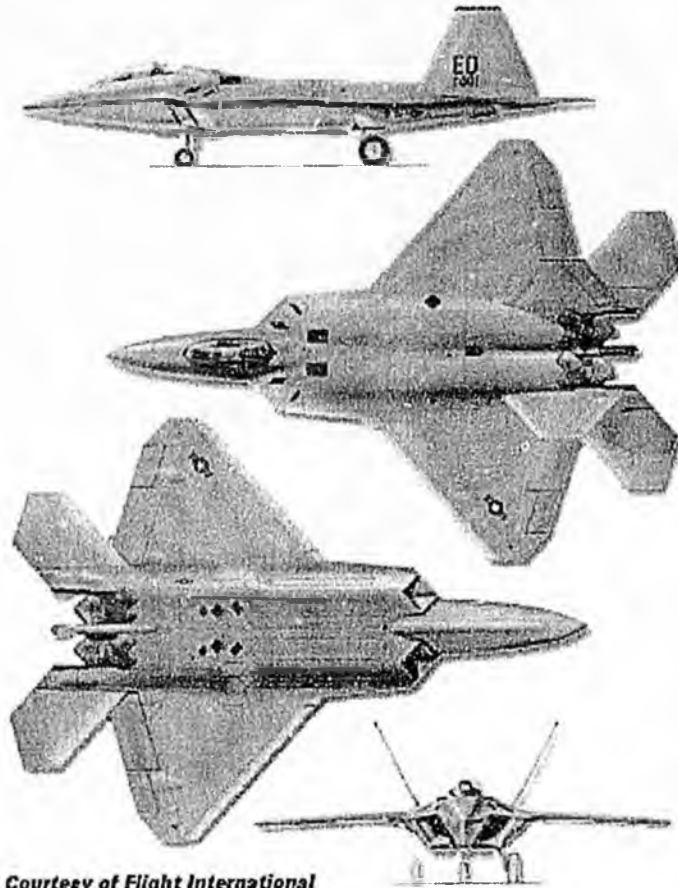
[◀ Back to Nation/Politics](#)





Lockheed Martin Aeronautics Company

F-22 NEXT-GENERATION AIR DOMINANCE FIGHTER



Courtesy of Flight International

program.

Lockheed Martin Aeronautics Company, and Boeing Defense & Space Group's Military Airplanes Division are teamed to develop the F-22 as a replacement for the F-15 fighter currently in use by the U.S. Air Force.

The team was selected by the Air Force on April 23, 1991, as the winner of its Advanced Tactical Fighter (ATF) competition. The Air Force awarded the team an Engineering and Manufacturing Development (EMD) contract on August 2, 1991.

As the result of a Fiscal Year '93 funding shortfall due to cost increases and a Congressional budget cut, and two additional budget cuts in FY '94 and FY '95, the F-22 EMD program schedule was rephased in early 1993 and again in mid 1994. The FY'96 budget request was reduced by the Department of Defense, which necessitated a third rephase of the F-22

BACKGROUND

The F-22 Team was formed in 1986, when Lockheed, Boeing, and General Dynamics (now Lockheed Martin Aeronautics Company) joined forces for the ATF competition. The teaming arrangement, still in place, has allowed unprecedented industry cost sharing and takes advantage of the companies' strengths in advanced technology application, production capability, and systems integration.

Prior to its selection as the winner of the ATF competition, the F-22 team conducted a 54-month demonstration/validation program involving the design, construction, and flight testing of two YF-22 prototype aircraft.

Two prototype engine designs, the Pratt & Whitney YF119 and General Electric YF120, were developed and tested in the program. The Pratt & Whitney F119 engine was selected by the Air Force to power the F-22. Each F-22 will have two engines.

The demonstration/validation program, in which all three airframe companies shared work and program costs equally, was completed in December 1990.

Following the current EMD phase (formerly called full-scale development or FSD), which will

last until 2002, the Air Force plans to procure 438 production F-22s.

First flight of an EMD aircraft occurred on September 7, 1997. Current plans call for the Air Force's Air Combat Command to achieve initial operational capability with the F-22 in late 2004.

Lockheed Martin Aeronautics Company (LM Aero) serves as the prime contractor on the F-22 program and a majority of work (35 percent) in the EMD and production phases will take place at the company's facility in Marietta, Ga. (Air Force Plant 6). The remaining two-thirds of the work is being performed at both LM Aero facility in Fort Worth, Tex. (Air Force Plant 4) and at Boeing's plant in Seattle, Wash.

During the demonstration/validation program, work was performed at Lockheed's facility in Burbank, Calif., at General Dynamics, and at Boeing. The YF-22 prototypes were assembled at Lockheed's Palmdale, Calif., facility and made their maiden flights from there. Lockheed's program management and aircraft assembly operations were transferred to its Marietta, Ga., facility in 1991.

NEED

The F-22 is being developed to counter the increasing sophistication and threat of hostile air forces and integrated air defense systems in use around the world. This fighter will provide air dominance and a precision ground attack capability for U.S. forces well into the 21st century. Its predecessor, the F-15, entered the Air Force inventory in 1975.

Air and ground threats that the F-15 will no longer be able to counter will be defeated by the lethal and survivable F-22, with its balance of increased speed and range, enhanced offensive and defensive avionics, and reduced observability. The F-22's design also emphasizes reliability and maintainability of systems.

THREAT

The F-22 will be capable of flying and fighting against the most advanced integrated radar networks and dense surface-to-air missile environments in the world -- now and in the future. A new generation of fighters is under development in several countries around the world today as well as in the former Soviet Union.

The advent of these new fighters as well as the continuing export of the latest in air defense and adversary advanced fighter technology to the Third World will place at increasing risk the United States's ability to gain and maintain air superiority, much less air dominance.

The F-22 will be needed to maintain the air dominance that was displayed by U.S. forces during the Persian Gulf war. Success of any major air-land operation--today and in the future--will depend primarily upon America's ability to detect and destroy enemy fighters, but also to attack high-value ground targets with precision weapons as well.

ENGINES

The F-22 will incorporate a new, higher thrust-to-weight engine, the Pratt & Whitney F119-PW-100, which is designed for efficient supersonic operation without afterburner (called supercruise), and with increased durability over current engines.

Advanced technologies incorporated in the 35,000-pound-thrust class F119 include integrated flight-propulsion controls and two-dimensional, thrust-vectoring engine nozzles, which will give the F-22 unprecedented aircraft maneuverability.

Development of the F119 is taking place at Pratt & Whitney's West Palm Beach, Fla., facility, while production will take place at the company's factories in Middletown, Conn.

Pratt & Whitney will build 27 flightworthy engines during EMD. Each F-22 will be powered by two F119 engines.

WEAPONS

The F-22 is capable of carrying existing and planned air-to-air weapons in internal bays. These include six radar-guided AIM-120C Medium-Range Air-to-Air Missiles (AMRAAMs) in the main weapons bay (or four earlier version, longer-finned AIM-120A AMRAAMs), and two heat-seeking, short-range AIM-9M Sidewinders (one in each side weapons bay). The F-22 will also have an internal M61A2 20-mm cannon, an advanced version of the proven M61 Gatling-type gun.

In addition, the F-22 will have an inherent ground attack capability, as it can carry two 1,000-pound-class GBU-32 Joint Direct Attack Munitions (JDAM) internally (in place of two of the AIM-120s). The F-22 will also have provisions to carry other weapons in the future.

PROTOTYPE RISK REDUCTION

The risk involved in proceeding with the EMD program was significantly reduced by the aggressive and successful dem/val effort. The flight phase involved Company and Air Force test pilots flying both prototype YF-22s a total of 74 flights and 91.6 hours. Major achievements included supercruise, weapons employment (live AIM-9/ AIM-120 missile launches), thrust vectoring, air refueling, and high angle of attack (60 degree AoA) flight.

Another major achievement was the development, integration, and demonstration of prototype avionics hardware, architecture, and software. This effort involved 16 major subcontractors working as a team to demonstrate the F-22 avionics concept first in Boeing's Avionics Ground Prototype Laboratory, followed by airborne tests in Boeing's 757 Airborne Flying Laboratory (AFL).

These risk-reducing demonstrations validated Lockheed's approach to integrated avionics and ability to develop Ada software (800,000 lines of code). In addition, the Lockheed team completed an avionics architecture demonstration utilizing brassboard processing hardware to validate the Air Force's Pave Pillar fault tolerant, reconfigurable, design concept.

Based on extensive trade studies and near-real-time effectiveness analysis, the F-22 Team flew its design in a series of USAF/USN full mission simulations to validate overall weapon system effectiveness during the dem/val phase.

This simulation involved very high fidelity manned and unmanned airborne and surface-to-air threats in a variety of Air Force-dictated scenarios to evaluate cockpit design, control mechanization, and Pilot/Vehicle Interface. The result was a highly effective cockpit avionics

suite now undergoing final development during the EMD phase.

A final major achievement in the demonstration/validation phases was the construction and testing of a full-scale pole model of the F-22 for radar cross section measurement. As in previous efforts, the F-22 team met the Air Force goals in this area.

A key goal of the program was to define the design/capability tradeoffs required to meet Air Force cost goals. This was achieved. EMD proposed designs, performance data, and cost trade-offs derived from the dem/val program are based on a balance of lethality, survivability, producibility and affordability.

TECHNOLOGIES

In addition to greater lethality and survivability, the F-22 design calls for higher reliability, maintainability, and sortie generation rates than the aircraft it will replace. The design goal for all areas is a 100 percent improvement over the F-15 weapon system.

The F-22 will provide a first-look, first-shot, first-kill capability through the use of reduced observables and advanced sensors. To decrease the reaction time of enemy threats, increased supersonic cruise, and maneuverability goals have been set. To improve operations from battle-damaged runways, the F-22 offers significantly reduced takeoff and landing distances, as compared to today's frontline fighters.

A greatly increased combat radius, using internal fuel only, will give F-22 pilots the capability to engage the enemy over his territory and support long-range air-to-ground assets such as the F-15E. The F-22 will also bring a precision ground attack capability to the battlefield.

AVIONICS

The F-22's avionics suite will feature extensive use of very high-speed integrated circuit (VHSIC) technology, common modules, and high-speed data buses. The avionics suite will be a highly integrated system maximizing performance allowing the pilot to concentrate on the mission, rather than on managing the sensors as in current fighters.

Technologies to be incorporated in the F-22 include a Common Integrated Processor (CIP), a central "brain" with the equivalent computing throughput of two Cray supercomputers; shared low-observable antennas; Ada software; expert systems; advanced data fusion-cockpit displays; integrated electronic warfare system (INEWS) technology; integrated communications, navigation, and identification (CNI) avionics technology; and fiber optics data transmission.

Nearly all of these elements were demonstrated during dem/val in a prototype architecture.

AIRFRAME DESIGN

The F-22 will represent a significant design evolution beyond the highly successful F-117A Nighthawk stealth fighter and it will have performance not achievable by today's front-line fighters.

Low observable, or stealth, technology has advanced to the point where conventional aerodynamic configurations can be made incorporating low observability without compromising aerodynamic

performance or increasing costs significantly.

Design development risk was greatly reduced by the performance demonstrated in the dem/val program where angle of attack attitudes up to 60 degrees were flown. The validity of the low observability features of the F-22's design were confirmed by full-scale pole model testing.

The F-22 design will incorporate the latest advances in flight control technology including fiber optics, digital computers, and integrated propulsion controls for exceptional stability and handling. The operation of the two-dimensional thrust vectoring engine nozzles will be transparent to the pilot.

Thermoset and some thermoplastic composites will be used extensively for more efficient aerodynamic and structural design with reduced weight. Approximately 27 percent of the F-22 by weight will be composite materials.

Other technologies to be incorporated include high pressure, non-flammable hydraulic systems, hydraulically actuated weapon racks, a central maintenance identification and record-keeping system, and conformal sensors.

INTEGRATED PRODUCT TEAMS

The Integrated Product Team (IPT) approach is being used to develop the F-22. Under the IPT concept, each of the more than 80 permanent teams is completely responsible for its "product" (avionics, cockpit, airframe, utilities and subsystems, etc.), from engineering a part or system, controlling its cost and schedule, and insuring that it can be manufactured and supported once in use.

PROGRAM

Compared to previous fighter programs, the F-22 design is extremely mature and has unprecedented design fidelity at this stage of development.

More than 36,000 hours of wind tunnel testing have been completed in the F-22 development program so far. A total of 19,195 test hours were accumulated in the demonstration/validation phase of the program for the YF-22 prototype, and a total of 16,930 wind tunnel test hours were completed on the refined F-22 configuration during the current EMD phase.

Approximately 900 more hours will be needed to complete the F-22's wind tunnel test program, and these hours will be almost exclusively dedicated to weapons separation testing for the GBU-32 and AIM-9X weapons. This testing will be completed in 1997.

Additionally, structural component testing, analytical model testing, and evaluation of approximately 13,000 materials coupons (test specimens) have contributed to the high confidence the contractor team has in the design of the F-22 at this point.

The Preliminary Design Review (PDR), a major program milestone, was reached in the spring of 1993.

Critical Design Review (CDR), the final major milestone before assembly began, was completed in 1995. The purpose of the review was to ensure that all performance and functional

requirements had been incorporated into the design of the F-22; to verify that required development tasks involving detailed design had been completed; and to confirm the program meets all necessary criteria to proceed into the next development phase, fabrication and assembly.

Fabrication of the first part for the first flyable F-22 began on December 8, 1993, at Boeing's facilities in Kent, Wash. The first part is a forward boom keelson panel made of titanium.

Assembly operations of the first flyable F-22 began on schedule at Lockheed Martin Tactical Aircraft Systems in June, 1995. Boeing began assembly of the aft fuselage in October, 1995, and assembly of the wings in January, 1996. Assembly of forward fuselage began in Marietta in November, 1995.

LMTAS completed assembly of the mid fuselage in August, 1996, and, after shipment to Marietta, mate operations began. The aft fuselage is scheduled to arrive in Marietta in mid October, 1996, and the wings in November. The first two Pratt & Whitney F119 engines are scheduled to be installed in the first aircraft in December, 1996.

DIVISION OF WORK

Lockheed Martin Aeronautical Systems (Marietta, Ga.) is responsible for overseeing overall weapon system integration; developing and constructing the forward fuselage, including the crew station; the vertical fins and stabilators; wing and empennage leading edges, flaps, and flaperons; landing gear; and spearheading avionics architecture development and functional design, as well as displays, controls, the air data system, and apertures.

Lockheed Martin Tactical Aircraft Systems (Fort Worth, Tex.) is responsible for developing and constructing the mid-fuselage; armament; providing the tailored INEWS, CNI, stores management systems and inertial navigation systems; and development of the support system.

Boeing is responsible for the wings and aft fuselage; structures for installation of the engines, nozzles, and auxiliary power unit; operation of the Avionics System Integration Laboratory, and the 757 Avionics Flying Laboratory; and development of the training system.

The F-22 will be 62 feet, 1 inch long, have a wingspan of 44 feet 6 inches, and will stand 16 feet, 5 inches tall. The F-22A is a single seat aircraft.

F-22 CHRONOLOGY

(Including F119 engine dates)

1980's

November 1981

Air Force identifies need for advanced tactical fighter to replace the F-15.

May 1983

Pratt & Whitney initiates design of the PW5000, which is later designated F119.

Subject: Re: SJR 3 Committee Teleconference

Date: Fri, 19 Jan 2001 09:51:37 -0900

From: john joeright <John_Joeright@Legis.state.ak.us>

Organization: Alaska State Legislature

To: Joseph Balash <Joe_Balash@Legis.state.ak.us>

Joe,

3008

Please note that Lt Col. Larry Jones at Elmendorf will be using (907)552-3003 for his offnet number and Lt Col. Burton Wiggins will be using (757)764-4480. Both await your call.

Thanks

John Joeright

For Senator Loren leman

Joseph Balash wrote:

> John,

>

> SJR 3 will be heard in STA next Thursday at 3:30 in the Beltz Room. I've
> set up the teleconference with the off-nets. I have put in calls to each of
> the Colonels but neither were in yet. Once I hear from them, I'll confirm
> where they'll be at 3:30 on Thursday. Let me know if there's anything else
> you need.

>

> Joe

>

> john joeright wrote:

>

> > Dear Joe,

> >

> > Concerning the teleconference for SJR3, I am providing the telephone
> > numbers for both witnesses who will be testifying in committee. Can you
> > please call them both and arrange the off nets with them?

> >

> > The first person is Lt. Colonel Jones with environmental planning at
> > Elmendorf. His telephone number is (907)552-4486. Lt. Colonel Jones will
> > give testimony regarding the F-22 aircraft as it pertains to Elmendorf's
> > environment and infrastructure.

> >

> > Lt. Colonel Burton Wiggins is at Langley Air Force base in Virginia and
> > is the main witness on this resolution. Wiggins will be the expert on
> > the Raptor's performance, tactics, weapons, environmental impact studies
> > as well as the generic bedding down of the aircraft. He is also
> > responsible for the current classification guide on the F-22.
> > Colonel Wiggins can be reached at (757)574-4480. He is aware that
> > someone will be calling. Please bear in mind the four hour time
> > difference.

> >

> > Finally, will you be taking care of the bridge numbers or do I need to
> > do that?

> >

> > Thanks

> >

> > John Joeright for

> > Senator Loren Lemman

*F-15C doesn't go up the Valley
F-15E goes @ high altitude
↳ he nor Wiggins will not testify/respond to complaints on flight paths*

State Affairs Committee
Master File

Bill #: SJR. 3
Bill Title: _____
Short Title: _____
Sponsor: Leman

Sponsor's Staff/extension: John

Drafter _____

Copy of bill? Y / N

Fiscal Notes? Y / N

Requested: _____

Received: _____

Sponsor Statement Y / N

Letter of intent Y / N

Sectional Analysis Y / N

Position Papers Y / N

Amendments/Revisions Y / N

Back-up Y / N

Hearing Date: 1/25/01

Follow-up Meeting(s): _____

Teleconference? Y / N

Date set _____

Location(s) _____

Off-Nets? Y / N

Bridge Number

Name/# Lt. Col. Burton Wiggins, # (757) 574-4480

Name/# Lt. Col. Jones (907) 552-4480

Name/# _____

Name/# _____

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX

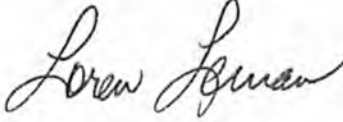
During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX



Senator Loren Leman

MEMO

TO: Senator Gene Therriault, Chairman
State Affairs Committee

FROM: Senator Loren Leman 

DATE: January 16, 2001

RE: Scheduling Senate Joint Resolution 3: F-22 Raptor aircraft

Please Schedule **SJR 3: F-22 Raptor aircraft deployment at Elmendorf Air Force Base** at your earliest possible convenience.

I introduced this legislation to support deployment of the F-22 Raptor aircraft at Elmendorf Air Force Base by the United States Air Force. SJR 3 expresses the legislature's support for this deployment because it will add to our state's economy and maintain our nation's superior, strategic front-line air defenses.

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX



During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX

Senator Loren Leman

Sponsor Statement – Senate Joint Resolution 3

“F-22 RAPTOR AIRCRAFT AT ELMENDORF AFB”

SJR3 encourages the United States Air Force to select Elmendorf Air Force Base for deployment of the F-22 Raptor. This aircraft will complement existing defense capabilities and significantly boost Alaska’s economy. Deployment of the Raptors at Elmendorf will pump \$150 million to \$300 million into the Alaska economy during the construction phase and will add 846 new personnel to the deployment area over a three-year period.

The state-of-the-art Raptors will replace two squadrons of the Air Force’s aging F15C aircraft as the world’s top front line fighter plane.

An Alaska deployment puts the world’s top fighter aircraft on a forward base at one of the most strategic locations in North America and complements the U.S. military’s first strike capabilities.

If Elmendorf AFB receives the three Raptor squadrons, one squadron of F15E’s will remain on base full time, along with some F-15C’s for the winter months.

**Prepared by John Joeright, Legislative intern to Senator Loren Leman, (465-3841)
Last updated January 12, 2001)**

Subject: SJR 3 Committee Teleconference
Date: Wed, 17 Jan 2001 15:06:29 -0900
From: john joeright <John_Joeright@Legis.state.ak.us>
Organization: Alaska State Legislature
To: Joe Balash <Joe_Balash@Legis.state.ak.us>

Dear Joe,

Concerning the teleconference for SJR3, I am providing the telephone numbers for both witnesses who will be testifying in committee. Can you please call them both and arrange the off nets with them?

The first person is Lt. Colonel Jones with environmental planning at Elmendorf. His telephone number is (907)552-4486. Lt. Colonel Jones will give testimony regarding the F-22 aircraft as it pertains to Elmendorf's environment and infrastructure.

Lt. Colonel Burton Wiggins is at Langley Air Force base in Virginia and is the main witness on this resolution. Wiggins will be the expert on the Raptor's performance, tactics, weapons, environmental impact studies as well as the generic bedding down of the aircraft. He is also responsible for the current classification guide on the F-22. Colonel Wiggins can be reached at (757)574-4480. He is aware that someone will be calling. Please bear in mind the four hour time difference.

Finally, will you be taking care of the bridge numbers or do I need to do that?

Thanks

John Joeright for
Senator Loren Leman

Lt. Col. Wiggins — no answer

Lt. Col Jones — left message