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Pacific Raptors: F-22A based in Alaska

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THE MOST RECENT FLURRY OF PRESS SURROUNDING THE F-22A RAPTOR has been largely focused on the Pentagon decision mid January to keep the F-22A production line open beyond former SecDef Rumsfeld's arbitrarily imposed production limit of 183 aircraft. Deputy SecDef Gordon England, known to be a high profile advocate of the Joint Strike Fighter, opposed and continues to oppose this decision despite strong pressure from legislators and the US Air Force.



Much less visible than the political controversy in Washington surrounding production numbers has been the quiet preparation of Elmendorf AFB in Alaska for the permanent basing of the first Pacific Rim F-22s.

Elmendorf AFB is the hub of US Air Force fighter operations in Alaska, and in a sense it plays a similar role to RAAF Tindal in the strategic air defence of the continent. While Tindal is the gatekeeper in northern Australia, Elmendorf is the gatekeeper for inbound eastern bomber routes to the United States via Siberia and the Far East. As a result, Elmendorf has hosted a wing of F-15C Eagle air superiority fighters since 1982, part of the 3rd Wing, and the headquarters for Alaskan Command (ALCOM), the Alaskan NORAD Region (ANR), the Eleventh Air Force (11 AF).

The 3rd Wing is a full Air Expeditionary Force lead wing, and comprises F-15C/D, E-3B, C-17 and C-12 aircraft, plus the 6,600 personnel to operate these types. The 19th Fighter Squadron equipped with F-15C/D and the 90th Fighter Squadron equipped with F-15E were the mainstay of Alaskan air capabilities until the arrival of the F-22 Raptor this year.

Current planning calls for the 90th FS to convert from the F-15E to the F-22 Raptor, which began in August last year. In addition, the 525th FS, a former USAFE F-15C unit deactivated in 1992, is being reactivated as an F-22 unit at Elmendorf.

These units will be supported by the newly formed 10th Air Force 447th Fighter Group comprising the 302nd Fighter Squadron, currently the only reserve unit to operate the F-22. The 302nd FS is historically best known for being one of the two 'Tuskegee Airmen' P-51 squadrons during World War II. The first F-22s for the 477th FG arrived in August, last year.

As of mid January 2008 the first Alaskan F-22As were practising inert JDAM bomb drops in preparation for a formal declaration of unit Initial Operational Capability (IOC). This effort has run in parallel with extensive personnel training for the new fighters, including that of reservist ground crews at other Alaskan bases to allow them to launch and recover F-22As from diversion sites across Alaska. Alaskan winter weather conditions are such, that even the F-22s may be forced to seek alternates.

The 1st Fighter Wing at Langley AFB, Virginia, was the first operational unit to convert to the F-22, and in mid December last year the USAF declared Full Operational Capability for the Langley-based 1st FW and Virginia Air National Guard's 192nd Fighter Wing, both now equipped with the F-22. The 27th FS of the 1st FW was the first unit to achieve operational capability. The elite 1st FW created considerable press coverage in recent years with its deployments to Kadena AFB in Okinawa, the Red Flag exercise last year, the Combat Hammer bombing exercise, and the Northern Edge exercise in Alaska.

Holloman AFB in New Mexico, the home of the now retiring F-117A Nighthawk 'Stealth Fighter' is to also transition to the F-22A Raptor as the venerable F-117As are sent into mothballs and the 49th Fighter Wing is re-equipped with the new aircraft. The F-117A, a specialised bomber, distinguished itself in every air major campaign since Desert Storm in 1991. The 49th Fighter Wing has been working closely with the 1st Fighter Wing since August last year to effect a smooth transition. The intent is that the accrued operational expertise in precision strike operations built up since the F-117A entered service during the early 1980s is

transferred without loss to the F-22 operational community. All F-22s are currently capable of delivering a pair of JDAM satellite-aided smart bombs, and flight testing is under way to qualify the new GBU-39/B Small Diameter Bomb on the F-22, which will carry the same internal payload of eight rounds, as intended for the Joint Strike Fighter.

The 49th FW comprises the 7th Combat Training Squadron and the operational 8th Fighter Squadron and 9th Fighter Squadron. This unit took over operation of the F-117A from the 37th Tactical Fighter Wing during the mid-1990s' restructuring and downsizing of the US Air Force.

US media reports indicate that planning is under way to transition the 49th FW to the F-22 by the middle of this year. The intent is to transition the 8th and 9th FS to the F-22, with conversion training to cease at Holloman with the retirement of the F-117A.

Current planning is underway for the F-22 to be based at Hickam AFB in Hawaii, the primary Pacific Air Force base near Honolulu. The intent is to equip the 531st Fighter Squadron and Hawaii Air National Guard 199th Fighter Squadron with F-22s, replacing the F-15C by 2011. Hickam has previously hosted deployments of the 1st FW F-22s.





The US Air Force has finalised the list of units and bases which will receive the F-22A Raptor. Not surprisingly, only 40% of the units converting to the F-22A previously flew the specialised F-15C/D air superiority fighter - more than half of the F-22As are being assigned to previously specialised bomber units, or fighter-bomber units. With the current production aircraft equipped with a high resolution ground mapping radar capability, JDAM capability, and the Small Diameter Bomb well into clearance flight testing, the F-22A will become the primary deep penetrating fighter-bomber used by Air Combat Command.

As the ongoing re-equipment of legacy aircraft equipped units with the F-22 shows, the aircraft is being used to replace the F-15C, F-15E and F-117A, the latter two types used almost exclusively in the bombing role. Indeed, the F-117A has no other capabilities. Suffice to say detractors of the F-22 who have repeatedly claimed it cannot bomb effectively have evidently not kept up with the latest.

The USAF originally sought 700 F-22s but this was bureaucratically trimmed back to 600, then 560, then 433, then 322, and most recently by former SecDef Rumsfeld's edict down to 183 aircraft. The USAF continues to maintain that it requires at least 381 aircraft to effect proper replacement of the 400 strong F-15A-D fleet and the sole wing of F-117As.

Most recently, plans to keep the F-15C fleet in operation were dealt a severe blow when an early-build Missouri Air National Guard aircraft broke in two behind the cockpit as a result of upper fuselage longeron structural failure. Subsequent investigations during the grounding of all F-15C and D aircraft found manufacturing defects in the longerons of 191 airframes built between 1978 to 1985, nine of which had developed cracking. The out of spec longerons were manufactured thinner than required, causing the 1980-built Missouri ANG aircraft to break at less than 6,000 hours flying time, despite a claimed 30,000 hr life for a longeron built to spec.

Unlike the US B-52 and KC-135 or Australia's F-111, the F-15 has never been subjected to a systematic ageing aircraft program, which monitors problem

components and permits pre-emptive action, in part since the intent was always to replace the whole fleet of 441 F-15A-D with F-22s. As a result, the USAF is now discovering that the fleet is in far worse condition than earlier believed.

In January 2008, the head of Air Combat Command, General John Corley observed: "I have a fleet that is 100 per cent fatigued and 40 per cent of that has bad parts. The long-term future of the F-15 is in question."

The reality is that the location of the defective parts in the airframe precludes economical repair, and presents even greater difficulty than the centre barrel replacement of classic F/A-18s, a program itself fraught with problems.

As a result, this has reopened the long running and heated US debate about how many F-22s should be built. The USAF has repeatedly argued that more aircraft are needed for strategic force structure planning and capability reasons, in addition to relieving the heavily flown F-15 fleet. At present, only 259 F-15A-D have been cleared to resume flying operations, these aircraft now being flown at a higher rate to cover the absence of the grounded aircraft. The long-term impact of this will be to burn out airframe hours even faster than previously planned.

The principal opponent to the drive for more F-22s of recent times has been the DepSecDef Gordon England, who replaced Rumsfeld in this role. In Australia, England is best known for providing advice to former Defence Minister Nelson on the export of the F-22. In the US, England, formerly a naval officer and later President of General

Dynamics (later Lockheed-Martin) Fort Worth Aircraft Company, is widely regarded to be the strongest proponent of the Joint Strike Fighter in the Pentagon, and one US observer commented to this author last year that England was "determined to put JSFs on Navy carrier decks no matter what the cost elsewhere".

US press reports this January indicated that during an early January high level DoD meeting, England was defeated and agreed to fund four more F-22s in the 2009 budget. Well known US analyst Loren Thompson at the Lexington Institute was recently quoted in the UK Financial Times: "The deputy secretary is fighting hard to prevent continuing production of the F-22 but he seems to be losing the battle both inside the Pentagon and on Capitol Hill." In December 2007, no less than 28 US Senators signed a letter in which they called for the production of more F-22s, the letter citing three classified reports which concluded that more F-22s were required.

The US is now coming under strategic pressure to make up for USAF capability decline over the last decade, while the usable life of its legacy fighter fleet is being burned out by the Global War on Terror and now the discovery of the defective F-15 longerons. These three trends are now colliding, and further debate over F-22 numbers is expected in the US this year. Funding for more F-22s can only come, longer term, out of the budgets currently earmarked for production of the Joint Strike Fighter.

