Correcting the Record: F-35A at Truax Field

Myth: According to Lockheed Martin, the F-16 can fly to 2070 and beyond. If the base is not in danger of closing, the real economic impact of the F-35A is 64 new jobs.

Fact: The F-16C/D Block 30 has been in service at Truax Field since 1992 and is nearing the end of its service life. The U.S. Air Force is replacing the F-16 with the F-35A, and basing the F-35A at Truax Field will secure a <u>flying mission</u> for the 115th Fighter Wing for decades to come.

Air National Guard bases that lose their flying mission have faced significant personnel cuts and commensurate reductions in economic impact. After losing its flying mission, the 131st Fighter Wing of the Missouri Air National Guard <u>transferred its F-15s</u> to other bases and reassigned 600 guardsmen to a base three hours away. Four hundred guardsmen remain to provide mission support functions. Then U.S. Air Force Secretary Heather Wilson <u>said under oath</u> to U.S. Sen. Patrick Leahy of Vermont during a May 2018 hearing that if Burlington did not get the F-35A, they would likely lose their flying mission, and <u>indicated</u> the same in writing to Burlington Mayor Miro Weinberger.

Without a flying mission, the 115th Fighter Wing would have less <u>military value</u> and be much more susceptible to closure in a future round of base realignment. The F-35A ensures continuation of the 115th Fighter Wing's 1,200 jobs and \$100 million local economic impact, as well as 64 new permanent jobs and 315-420 construction jobs.

Opponents have suggested that the 115th Fighter Wing could simply extend the service life of its current F-16s or accept used F-16s from other bases when its jets reach the end of their life. There are a few problems with this argument. The U.S. Air Force stopped purchasing F-16s in 2005, so these would be used jets with flight hours on them already. Additionally, these jets would be newer Block 40-52 F-16s that have approximately the same noise levels as the F-35A. The Service Life Extension Program is for the Block 40-52 jets, not the Block 30 jets that are currently based at Truax Field.

Myth: The F-35A jets will be at least four times louder than the F-16s that currently fly over Madison.

Fact: This claim originates from Table BR3.2-1 in the <u>Burlington EIS</u>, which is preceded by a statement clearly stating the data is only applicable to Burlington. The Royal Netherlands Air Force conducted <u>noise</u> <u>trials</u> in advance of their F-35A basing to allow residents to compare the noise levels with the F-16. Both jets flew 14 passes, and 1,500 residents provided real-time feedback on their impressions. Based on their responses, the differences were minor, with the F-16 perceived as having a more piercing sound. Sensors measured sound on the ground at various locations, and the F-16 registered 112 dB at its loudest, while the F-35A was 109 dB at its loudest. <u>According to experts</u>, the minimum change in sound level the human ear can detect is 3 dB. The <u>Draft EIS</u> shows noise differences of 3 dB or less for nearly all points of interest in Table WI3.1-12.

Myth: The F-35A jet will fly 47 percent more than the current F-16 squadron.

Fact: After pilots are F-35A qualified and the <u>alert mission</u> (protecting the homeland from threats) is transitioned from the F-16s to the F-35s, the Draft EIS projects an overall increase of 27 percent instead of 47 percent. The Draft EIS states that F-35A will arrive 2023-2024, and the U.S. Air Force has clarified that pilots should be qualified on the F-35A by 2025-2026.

Once pilots are F-35A qualified, off-station sorties (flights that take-off or land from other airfields) and deployments will resume, and that has historically made up 20 percent of all aircraft operations.

Additionally, Madison should have fewer flights than other comparable Wings with F-35s because the 115th Fighter Wing averages a 10 percent loss of flights due to weather and needs fewer takeoffs and landings due to the ability to refuel in the air, thanks to the 128th Refueling Wing in Milwaukee. These reductions are not accounted for in the Draft EIS, which uses the same number of baseline flights for all five beddown locations. The 115th Fighter Wing will continue to establish its flight schedule with Dane County Regional Airport in ways that reduce noise impacts. Currently that means flights Monday-Thursday at 9 a.m. and 1 p.m., and one Saturday per month.

Myth: Thousands of residents will be in homes unsuitable for habitation.

From the <u>City of Madison EIS analysis</u>: "This should not, however, be interpreted as the homes being uninhabitable as has been discussed by some in the community. It's not uncommon for residential units to be within the 65 dB contour, particularly in older cities and metro areas where the airport is relatively centrally located. This is the case with other airports in the region including Chicago O'Hare, Milwaukee, and Minneapolis Saint Paul."

Municipalities determine where residents can live. The <u>City of Madison EIS analysis</u> says clearly that "incompatible for residential use" does not mean uninhabitable. The FAA's designation of incompatibility defines whether FAA funding can be used to mitigate noise.

The noise impact figures and noise contours found in the Draft EIS are based on aircraft operations that will only exist during the first year. The long-term noise impact will be substantially lower, affecting far fewer residents than indicated in the Draft EIS.

Dane County Regional Airport's official noise exposure maps include the F-16 taking off in <u>afterburner</u> 100 percent of the time with roughly 30,000 more annual aircraft operations than the airport had last year. The Royal Netherlands Air Force <u>noise trials</u> show the F-16 at its loudest (in afterburner) is louder than the F-35A. The logical conclusion is that the noise contours for the F-35A should not be too dissimilar to today's noise exposure maps.

Just as Dane County Regional Airport did in the 1990s, a Part 150 study would be conducted, and sound mitigation will be provided for anyone impacted by airport noise at or above 65 dB DNL. As a result of the study, the number of residents within the 65-75 dB DNL contours has dropped by roughly 3,000 since 1990.

Myth: Mitigation will not be available for residents just outside the EIS noise contours.

Fact: EIS maps are not the maps that determine <u>Part 150 eligibility</u>. Dane County Regional Airport will conduct its own study using actual measurements and operations to determine noise exposure, and after approval from the FAA, eligibility will be established.

Myth: Dane County is responsible for all noise abatement.

As the sponsor, Dane County Regional Airport would apply for an <u>Airport Improvement Program</u> grant with the FAA as part of <u>Part 150</u>. Under the program, the FAA would cover 90 percent of noise abatement costs and the state would help to cover the remainder. The Wisconsin Legislature recognized its Part 150 role in the <u>Joint Resolution</u> that passed with overwhelming bipartisan support the week of October 7, 2019.

Myth: The F-35A will bring nuclear weapons to Madison.

Fact: The 115th Fighter Wing does not have a nuclear mission. The F-16s that have been flown at Truax Field for the past 32 years were also nuclear-capable jets. While the F-35A is a nuclear-capable aircraft, it will not ship to Truax Field with the necessary hardware or software due to the lack of a nuclear mission. The <u>City of Madison EIS analysis</u> supports this.

Myth: A leaked Air Force memo proves that the F-35A would use afterburner far more often than the five percent maximum described in the Draft EIS.

Fact: After receiving questions about this from U.S. Sen. Patrick Leahy of Vermont, the Air Force <u>made</u> <u>clear</u> that the memo only applied to the Air Force Reserve, not the Air National Guard, which is the type of installation that is based at Truax Field. <u>Afterburner</u> usage is based on runway length, air temperature and runway elevation and was adequately assessed in the Draft EIS. The Air Force stands behind its projection of five percent or less afterburner usage at Truax Field.



SECRETARY OF THE AIR FORCE WASHINGTON

MAY 2 2 2018

Mayor Miro Weinberger City Hall 149 Church Street Burlington, VT 05401

Dear Mayor Weinberger:

Thank you for your April 9, 2018 letter supporting the Air Force decision to base the F-35 at Burlington Air National Guard Base and for sharing the Burlington City Council's resolution.

We expect the first F-35 aircraft to arrive in Burlington in 2019. This decision was finalized in 2013 after a 48-month review which assessed 205 locations and concluded that the Burlington International Airport was the best Air National Guard option. If that decision were to be reversed, the Vermont Air National Guard would likely lose their flying mission upon the retirement of the F-16s. The Air Force is much smaller than it was at the end of the Cold War. We have fewer bases and fewer aircraft. As a result, some states no longer have flying missions for their National Guard and the competition to secure new missions is fierce.

As you mentioned in your letter, we received numerous comments on hosting F-35s at Burlington during the Environmental Impact Statement public involvement phases. Within this process, we addressed for public record the questions the City Council expressed in its resolution. As this basing action moves forward, we will continue to engage transparently with the community. In recent meetings I have had with Governor Scott and members of Vermont's Congressional delegation, they have also expressed their continued support for the Vermont Air National Guard and our decision to modernize fighter aircraft stationed there.

The Air Force has made significant investments in the State of Vermont and the City of Burlington. We estimate capital expenditures over the next 5 years to exceed \$100 million dollars, with payroll contributions of \$50 million dollars per year. Additionally, the Air National Guard will continue to provide the fire and safety equipment supporting the joint use of the airport by both military and commercial operations.

In every generation, there is a small percentage of Americans who volunteer to protect the rest of us. "The Green Mountain Boys" have made that commitment. The Air Force appreciates the leaders of Vermont and their support for our Airmen and for the modernization of their equipment.

Sincerely,

Heather Wilson



F-35, F-16 Noise Difference Small, Netherlands Study Shows

Aerospace Daily & Defense Report Tony Osborne Tue, 2016-05-31 11:43

LONDON – Analysis of the first noise trials in the Netherlands with the <u>F-35</u> Joint Strike Fighter has found that the difference in noise levels between the F-35 and <u>F-16</u> is perceived to be small.

The first trials took place May 26 following the May 23 arrival of two F-35As at Leeuwarden air base after the first eastbound transatlantic crossing by the new fighter. The aircraft has widely been reported to be louder than early and later models of the F-16 with more powerful engines. But the F-35's sound characteristics are different.

According to the Royal Netherlands Air Force (RNLAF) and the Netherlands Aerospace Center (NLR), which monitored the results of the online questionnaire in real-time as the sorties were flown, people living near Leeuwarden found that the noise difference between the two types tended to be minor. Locals suggested that the F-35 is less noisy than the high-pitch whine produced by the F-16.

The NLR and the RNLAF say this data is backed up by noise measuring equipment located near the base which measured peaks of around 109 dB for the F-35 and around 112 dB for the F-16. The F-35s were flown clean—with no external weapons or tanks—in what the RNLAF describes as a "training configuration commonly used for the Netherlands."

As part of the first trials, the air force performed a series of 28 passes, 14 with the F-35 and 14 with the F-16. Seven passes took place in the morning and seven in the evening, with and without reheat. Residents were then asked online to answer a series of questions about how they perceived the noise.

Around 1,500 households took part in the surveys near Leeuwarden and Volkel, the two Dutch air bases that will receive the F-35. The air force says the households were well distributed to give an impression of the noise impact around the bases.

As well as testing noise perception, the deployment will also confirm the compatibility of the F-35 with the hardened aircraft shelters on Dutch airfields. Later, the F-35 will make its European debut with an appearance at the RNLAF's Open Dagen airshow at Leeuwarden June 10-11.

The Netherlands currently has four pilots and 27 maintainers, and its cadre will grow substantially over the next three years as the Netherlands prepares for 37 aircraft to be permanently based, starting with Leeuwarden in 2019 and Volkel Air Base in 2021.

Source URL: https://aviationweek.com/defense/f-35-f-16-noise-difference-small-netherlands-study-shows



Exhibit 9

2008 Noise Contours - All Aircraft with F-16 Afterburner Departures

Dane County Regional Airport

		Ann	ual Aircr	aft Ope	rations	;		
YEAR	COMMERCIAL	GENE			MILITARY			COMBINED
	AIR CARRIERS	Local	<u>Itinerant</u>	Total	Local	<u>itinerant</u>	Total	TOTALS
1952	13,539	2,285	9,935	12,220	8,958	20,523	29,481	55,240
1975	24,611	86,491	69,191	155,682	13,454	9,693	23,147	203,440
1976	25,383	90,626	79,294	169,920	11,249	8,242	19,491	214,794
1977	27,066	84,963	70,730	155,693	8,293	7,362	15,655	198,414
1978	22,534	99,993	84,077	184,070	14,736	8,793	23,529	230,133
1979	22,904	100,715	87,360	188,075	13,428	8,348	21,776	232,75
1980	21,680	90,431	82,263	172,694	9 692	7,753	17,445	211,81
1981	18,134	68,347	80,994	149,341	6,755	7,957	14,712	182,18
1982	21,247	42,327	65,466	107,793	7,407	6,851	14,258	143,298
1983	21,695	47,305	63,360	110,665	8,122	6,976	15,098	147,458
1984	25,485	43,574	61,730	105,304	5,476	6,619	12,095	142,884
1985	32,820	48,483	55,443	103,926	8,291	7,580	15,871	152,61
1986	34,383	52,488	58,702	111,190	6,852	7,737	14,589	160,162
1987	29,294	47,021	57,174	104,195	5,650	7,184	12,834	146,323
1988	29,534	47,664	55,998	103,662	6;768	7,785	14,553	147,749
1989	29,159	48,472	58,270	106,742	5,218	8,812	14,030	149,93
1990	30,816	47,540	57,023	104,563	4,722	8,870	13,592	148,971
1991	30,137	43,852	51,474	95,326	3,002	7,598	10,600	136,06
1992	33,209	48,346	49,938	98,284	2,924	6,902	9,826	141,319
1993	32,430	51,052	48,944	99,996	3,296	7,874	11,170	143,590
1994	29,896	61,618	56,840	118,458	3,142	6,425	9,567	157,92
1995	29,614	52,299	55,426	107,725	2,368	6,611	8,979	146,318
1996	31,456	60,457	54,447	114,904	2,656	6,044	8,700	155,060
1997	32,287	51,104	54,874	105,978	2,343	4,896	7,239	145,504
1998	33,637	46,961	56,615	103,576	2,273	5,226	7,499	144,71
1999	35,932	41,917	58,268	100,185	2,939	5,102	8,041	144,15
2000	36,829	27,705	55,377	83,082	1,734	4,098	5,832	125,74
2001	40,086	29,297	52,661	81,958	1,715	4,796	6,511	128,55
2002	43,850	28,196	50,674	78,870	1,901	4,877	6,778	129,49
2003	42,010	33,096	50,016	83,112	2,082	4,286	6,368	131,49
2003	41,967	32,620	47,875	80,495	2,002	4,920	7,211	129,67:
2005	39,528	25,442	43,190	68,632	2,231	5,328	7,658	115,818
	39,034	25,960	43,180	68,449	2,865	5,285	8,130	115,61
2006 2007		31,251	42,469 39,927		4,112	4,702	8,814	119,76
T	39,768 37,309		35,416	71,178 64,611	4,425	4,789	9,214	111,134
2008	32,790	29,195						
2009		29,134	25,804	54,938	4,926	4,046 5,074	8,972	96,700 pe 201
2010	32,172	24,651	30,422	55,073	3,886		8,960	96,20
2011	32,587	17,302	28,328	45,630	1,022	4,024	5,046	83,263
2012	31,432	16,288	29,054	45,342	953	5,050	6,003	82,77
2013	34,106	17,807	27,882	45,689	561 205	4,504	5,065	84,860
2014	32,877	13,000	28,546	41,546	395	4,298	4,693	79,118
2015	29,520	14,182	29,592	43,774	466	4,236	4,702	77,996
2016	30,162	15,098	30,762	45,860	342	5,039	5,381	81,40
2017	30,552	18,239	31,030	49,269	230	3,488	3,718	83,53
2018	34,083	17,788	30,407	46,195	266	5,034	5,300	87,57
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