

# ***99th Air Base Wing, Nellis AFB, NV***

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## **NV Joint Military Affairs Committee Update 16 Aug 11**



**Colonel Steven Garland  
Commander  
99th Air Base Wing**

**This Briefing is:  
UNCLASSIFIED**



# Overview

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- **Renewable Energy / Conservation**
- **Hospital Redesignation**
- **Military Construction**
- **F-35 Beddown**
- **Cooperative Growth**



# Nellis AFB Energy Initiatives

## Xeriscape Installation Grounds

- Initial project converted 750K sq ft of grass to desert landscaping
  - Saved 45 million gallons of water/year
- Additional project converts 92K square feet
  - Saves 4.6 million gallons of water/year
  - Combined w/2007 project, saves 17% of Nellis' annual water usage
- Supports DoD goal of reducing demand for energy & resources



Before

*Honor the Warfighter*

After



# Nellis AFB Energy Initiatives

## Applied Use of Alternative Fuels

- **Converted vehicle fleet to B20 Biodiesel**
  - 80% petroleum to 20% biodiesel mix
  - Out of 685 diesel vehicle fleet, 661 vehicles use B20 Biodiesel
- **Developing E85 dispensing capability**
  - Four alternative fuel vehicles for every (one) traditional vehicle
  - 39% increase in alternative fuel use reduces sulfur emissions
  - 85% Ethanol to 15% Unleaded mix



Fueling Station w/B20 Pump



Proposed E-85 System



# Nellis AFB Energy Initiatives

## Distributed Solar PVA System

- Grid-assisted rooftop solar PV system on buildings planned
- Project supports DoD goal of diversifying energy options



Side view



Top View



# Nellis AFB Energy Initiatives

## Natural Gas Engine Driven Air Conditioning

- Field evaluation of natural gas engine heat pump system underway
- Demonstrations planned through Nov '11, funded by DoD
- If successful, equipment can be transferred to Nellis at zero cost
- Maintenance and sustainment would be funded by the base





# Nellis AFB Future Beta Test Electric GOV Fleet

- **Electric GOV test base**
  - Reduces demand for energy
  - Diversifies fuel sources
  - Indirect benefits (shade structures)
- **Field evaluation currently underway**

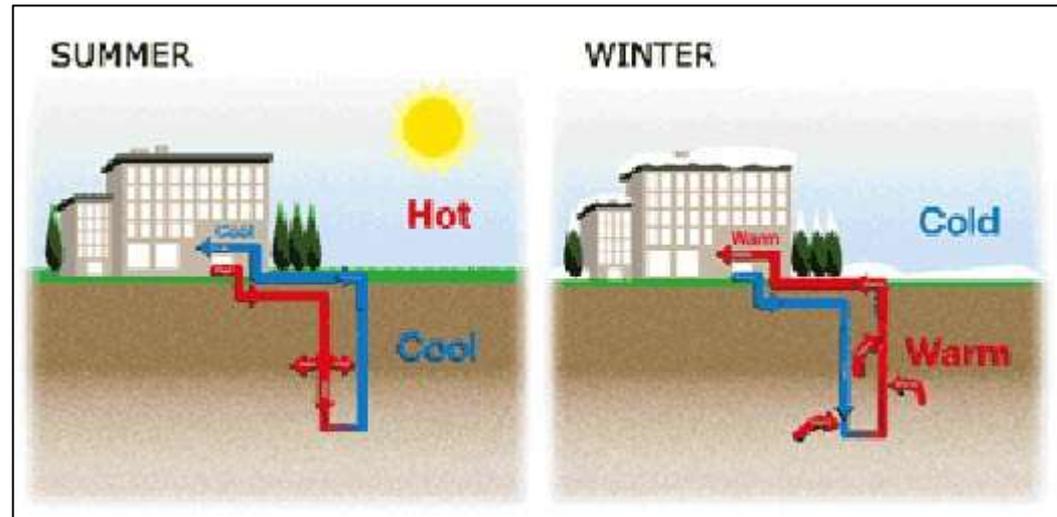
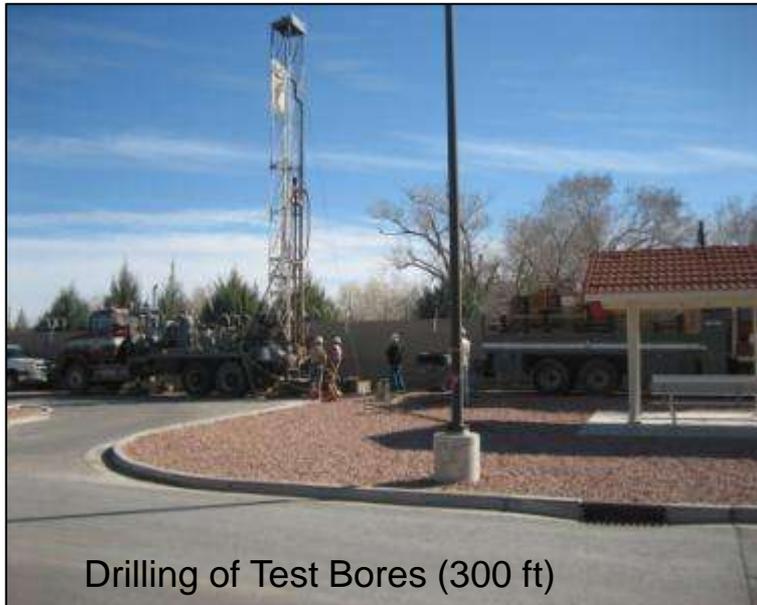




# Creech AFB Future Energy Initiatives

## Ground Source Heat Pump

- Uses earth as heat source/sink
  - Boosts heating/cooling efficiency
  - Reduces system costs
- System will be installed at 2 facilities
  - \$1.4M total cost
  - \$100K/year savings





# Mike O'Callaghan Federal Hospital Renaming

- **Named Mike O'Callaghan Federal Hospital in 104<sup>th</sup> Congress**
- **AF re-designated as a Medical Center in Spring '10**
  - **Reallocated 200 personnel from other facilities**
  - **Total personnel will increase to 1,500**
- **Legislation required to rename from Hospital to Medical Center**





# Unfunded Military Construction AF Budget Submission FY12

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<b>FY</b>	<b>PROJECT #</b>	<b>PROJECT TITLE</b>	<b>COST \$M</b>
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**New Mission: F-35 A**

12	RKMF 10-3001	F-35A Aircraft AGE Mx Complex	\$21.5
12	RKMF 10-3010	Add/Alter F-35A Engine Shop	\$ 2.7

**Current Mission:**

12	RKMF 10-3003	Communications Network Control Ctr	\$11.6
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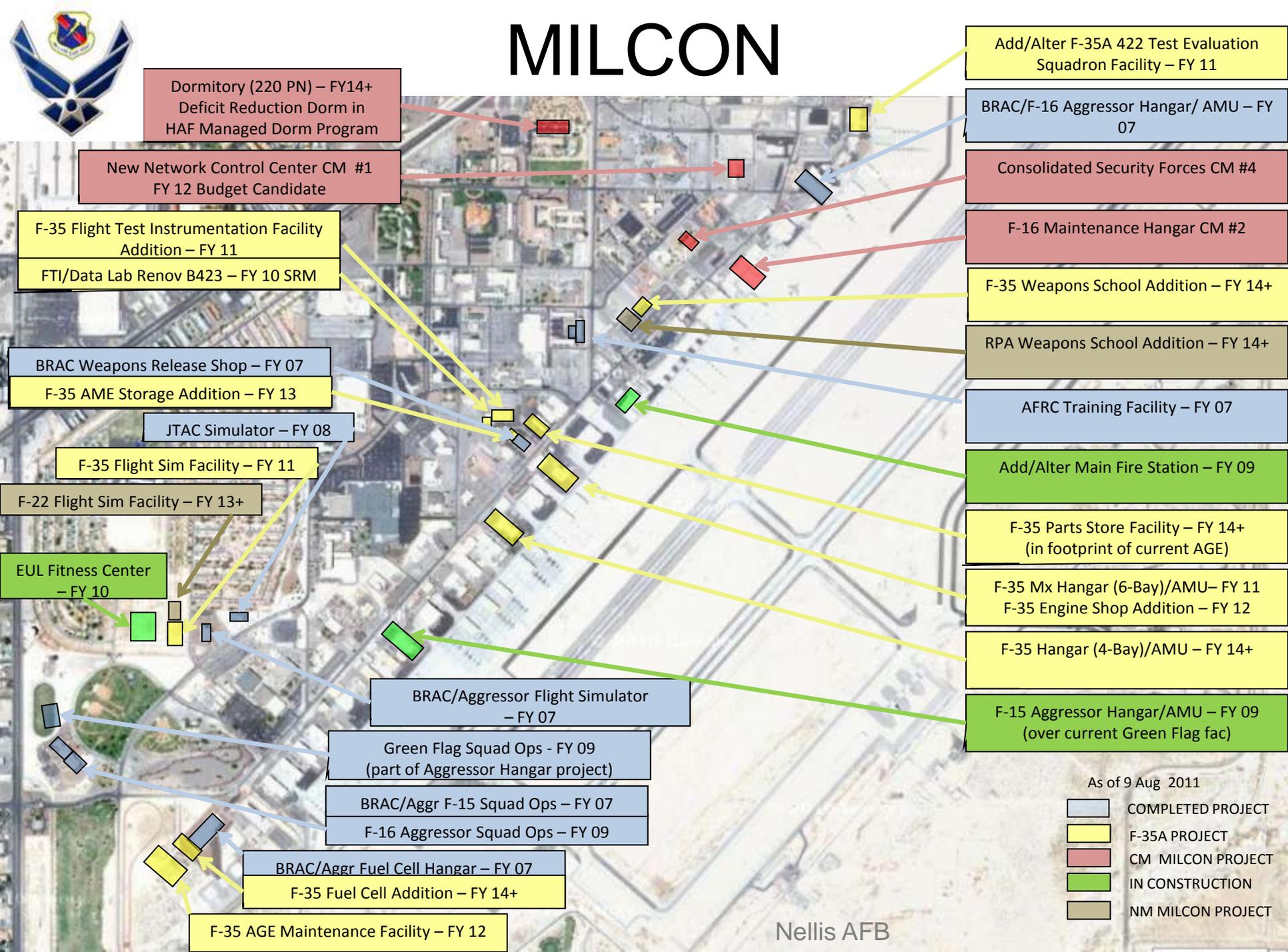
**Potential Additional Creech Project:**

12	LKTC 11-3112	RPA Mission Complex Physical Prot Sys	\$ 7.5
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**Total: \$43.3M**

# MILCON



Dormitory (220 PN) – FY14+  
Deficit Reduction Dorm in  
HAF Managed Dorm Program

New Network Control Center CM #1  
FY 12 Budget Candidate

F-35 Flight Test Instrumentation Facility  
Addition – FY 11  
FTI/Data Lab Renov B423 – FY 10 SRM

BRAC Weapons Release Shop – FY 07  
F-35 AME Storage Addition – FY 13

JTAC Simulator – FY 08

F-35 Flight Sim Facility – FY 11

F-22 Flight Sim Facility – FY 13+

EUL Fitness Center  
– FY 10

BRAC/Aggressor Flight Simulator  
– FY 07

Green Flag Squad Ops - FY 09  
(part of Aggressor Hangar project)

BRAC/Aggr F-15 Squad Ops – FY 07

F-16 Aggressor Squad Ops – FY 09

BRAC/Aggr Fuel Cell Hangar – FY 07

F-35 Fuel Cell Addition – FY 14+

F-35 AGE Maintenance Facility – FY 12

Add/Alter F-35A 422 Test Evaluation  
Squadron Facility – FY 11

BRAC/F-16 Aggressor Hangar/ AMU – FY  
07

Consolidated Security Forces CM #4

F-16 Maintenance Hangar CM #2

F-35 Weapons School Addition – FY 14+

RPA Weapons School Addition – FY 14+

AFRC Training Facility – FY 07

Add/Alter Main Fire Station – FY 09

F-35 Parts Store Facility – FY 14+  
(in footprint of current AGE)

F-35 Mx Hangar (6-Bay)/AMU– FY 11  
F-35 Engine Shop Addition – FY 12

F-35 Hangar (4-Bay)/AMU – FY 14+

F-15 Aggressor Hangar/AMU – FY 09  
(over current Green Flag fac)

As of 9 Aug 2011

- COMPLETED PROJECT
- F-35A PROJECT
- CM MILCON PROJECT
- IN CONSTRUCTION
- NM MILCON PROJECT

Nellis AFB



# MILCON Summary Nellis/Creech/NTTR

## ■ FUNDED:

■ FY05-FY08	\$233.9M
■ FY09	\$102.1M
■ FY10	\$ 32.7M
■ FY11	<u>\$ 55.4M</u>
■ Total Funded (4,610 job-years)	\$424.1M

## ■ UNFUNDED:

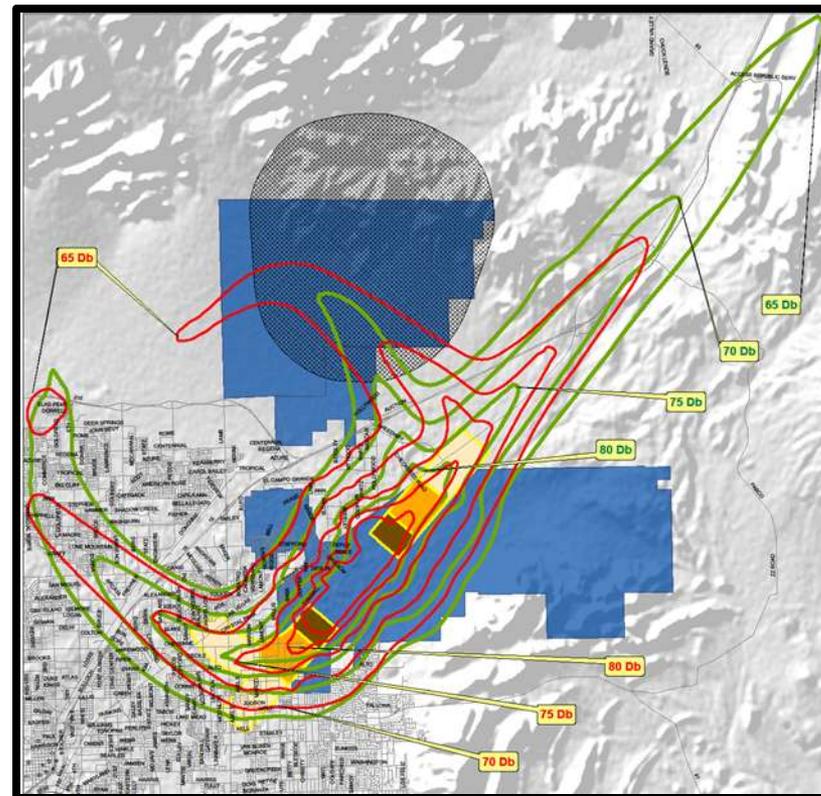
■ FY12 Current Mission (Top 20)	\$303.3M
■ FY12 New Mission	\$ 24.2M
■ FY13+ Current Mission	\$178.3M
■ FY13+ New Mission	<u>\$ 51.0M</u>
■ Total Unfunded (6,052 job-years)	\$556.8M

**GRAND TOTAL: 10,662 job-years / \$1 Billion**



# F-35 Beddown/MILCON

- Environmental Impact Statement Record of Decision June 2011
- Economic boom for NV
  - Total MILCON thru FY15 \$215.4M
    - 412 Direct mission jobs thru FY20
    - 2,341 MILCON jobs thru FY15
  - Total Mission/MILCON jobs 2,753

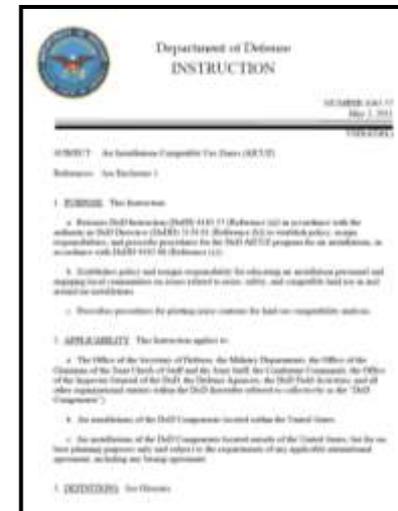
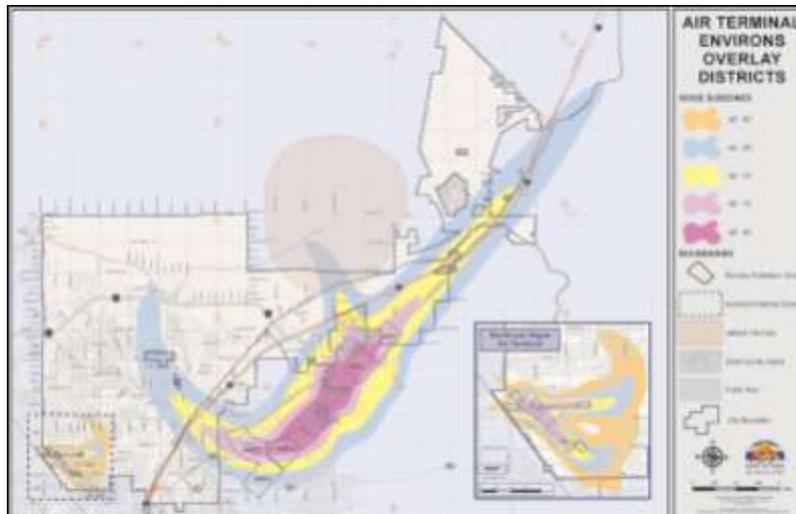


Noise Contour Comparison  
F-35 EIS to Current



# Cooperative Growth

- NV Senate Bill 93 was introduced to help protect military installations / ranges; however, it died in committee
- Working adoption of military activity plans/maps with each agency
  - North Las Vegas: passed zoning ordinance to protect Nellis AFB ops
  - Clark County: updated land use plan, working changes to zoning code
  - Nye County: passed master plan that helps protect/identify AF interests
  - BLM: updating Resource Mgmt Plans for Vegas/Battle Mtn Districts



**Goal: Grow Compatibly with Nevada**

# *Questions*

