Appendix B. to Report No. D-2010-063
(Project No. D2009-D000CH-0223.000)
May 21, 2010

Supplemental Information to Analysis of Air Force Secondary Power Logistics Solution Contract

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Introduction

Objectives. Our objective was to evaluate the data used in the business case analysis (BCA) to support the best value decision to award the Secondary Power Logistics Solution (SPLS) contract to Honeywell International Inc. (Honeywell). Specifically, we evaluated the accuracy of the baseline data related to availability, reliability, and cost; determined whether the Air Force adequately considered appropriate statutory and regulatory issues; and assessed the overall impact on the Defense Logistics Agency (DLA) and DOD supply system. During the review, we received a congressional inquiry relating to the consolidation of SPLS requirements.

Background. During a Lean Six Sigma project (D2009-D000CH-0002.000) designed to re-establish baseline costs on the DLA/Honeywell long-term contracts and to attain lower prices for Honeywell parts, we discovered that DLA had more than 4 years of inventory ($139.4 million) in relation to annual requisitions ($33.9 million). The excess inventory related primarily to consumable items used by Hill Air Force Base (DOD Activity Address Code FB2029).

(The initiative to re-baseline prices on the DLA/Honeywell long-term contracts reduced prices by about $9.5 million or 9.4 percent [based on 3-year demand of $100.8 million] and will be addressed in a separate report.)

Introduction (cont'd)

Demand Decline and DOD Inventory. We visited Hill Air Force Base to assess the reasons for the decrease in demand for DLA-managed consumable items and found that the Air Force had reduced its requisitions for consumable items that were purchased with the SPLS contract. The SPLS contract is a sole-source, performance-based logistics (fixed-price, power-by-the-flight-hour) contract with Honeywell. The auxiliary power units (APUs) for the B-2 and C-130 aircraft and ground carts had already transitioned to the SPLS contract (Spiral 1, Increment 1), and the F-15 secondary power systems (Spiral 1, Increment 2) were scheduled to transition in 2009 (now 2010).

In addition, a significant shortage of bearings caused the Air Force to reduce requisitions of consumable items used on F-15 secondary power systems. One of the reasons DLA was unable to supply bearings to the Air Force was that Honeywell was unable to obtain bearings from its manufacturers and had significantly increased delivery times. For example, DLA had no inventory for National Stock Number (NSN) 3110-00-554-8388, a cylindrical roller bearing, even though 2,766 were on order. Starting with order 2090 January 20, 2007, to order 4016 August 3, 2007, Honeywell had amended contract delivery days from about 205 days to between 597 and 759 days.

The Air Force had only limited plans to address DLA consumable item inventory and in fact, the DLA/Air Force collaborative forecasting continued to assume DLA would support the APUs.

Introduction (cont'd)

SPLS Strategy. On August 30, 2007, Hill Air Force Base awarded Increment 1 of the SPLS contract with an estimated value of about **$370 million** over 10 years to Honeywell. The SPLS contract provides logistics service and depot maintenance support for Hill Air Force Base and, according to Honeywell, should reduce maintenance costs by 10 percent. During the first increment of the contract, Honeywell will reportedly upgrade APUs and provide ground cart support and supply chain management services for the B-2 and C-130 aircraft.

Subsequent spirals and increments of the SPLS contract will add the F-15 Eagle [redacted], C-5 Galaxy and E-3 Sentry [redacted], A-10 Thunderbolt [redacted], B-1B Lancer [redacted], and F-16 Fighting Falcon [redacted]. The value of SPLS contracts for all spirals will total about $1.7 billion. The strategy will also include agreements with other original equipment manufacturers, such as Hamilton Sundstrand.

Additional Benefits Anticipated by the Air Force. Honeywell has embedded engineering staff on a just-in-time basis for support to increase production, resolve current problems, and reduce cycle time.

Results Summary

The SPLS strategy initially did not fully consider the impact on DLA consumable inventory, did not comply with statutory requirements (bundling* [Section 2382, title 10, United States Code, "Consolidation of Contract Requirements: Policy and Restrictions] and prime vendor contracts for depot-level maintenance and repair [Section 346 of Public Law 105-261, the "Strom Thurmond National Defense Authorization Act for Fiscal Year 1999," October 17, 1998, as amended by Section 336 of Public Law 106-65, October 5, 1999, added as a note to Section 2464, title 10, United States Code]), and was not consistent with Base Realignment and Closure (BRAC) 2005 recommendations. Our analysis shows that while the contract requirements do provide for better availability, any reliability improvements and lower costs are questionable. The following sections contain details on the issues and our recommendations.

- Issue A – DLA Impact – Sales and Inventory
- Issue B – Statutory Issues
- Issue C – Availability
- Issue D – Reliability Improvements
- Issue E – SPLS Costs
- Issue F – Congressional Inquiry – Bundling

***The United States Code and the Federal Acquisition Regulation define bundling as consolidating two or more requirements for supplies or services, previously provided or performed under separate smaller contracts, into a solicitation for a single contract.**

Issue A. DLA Impact – Sales and Inventory

Results. The SPLS philosophy moves supply operations and material management functions for consumable items from DLA to the private sector (Honeywell) with DLA becoming the second source of supply for consumable items used on secondary power systems at Hill Air Force Base. While the Air Force had addressed DLA inventory drawdown for a limited number of consumable items used on the aircraft secondary power systems, we identified $60-$80 million of consumable items used on the secondary power systems that had not been adequately addressed. After briefing the Air Force and DLA on the inventory issue (we also briefed the Director, Defense Procurement and Acquisition Policy), the Air Force and DLA took a "team deep look" at F-15 consumable item inventory and agreed to:

- use $51.1 million of DLA assets (as a first source of supply) throughout the life of the contract or until DLA assets are exhausted for 507 drawdown NSNs (95,638 total items) used on the F-15 aircraft at the DLA Standard Unit Price,

- enforce drawdown requirements through contract language with periodic metric reviews, and

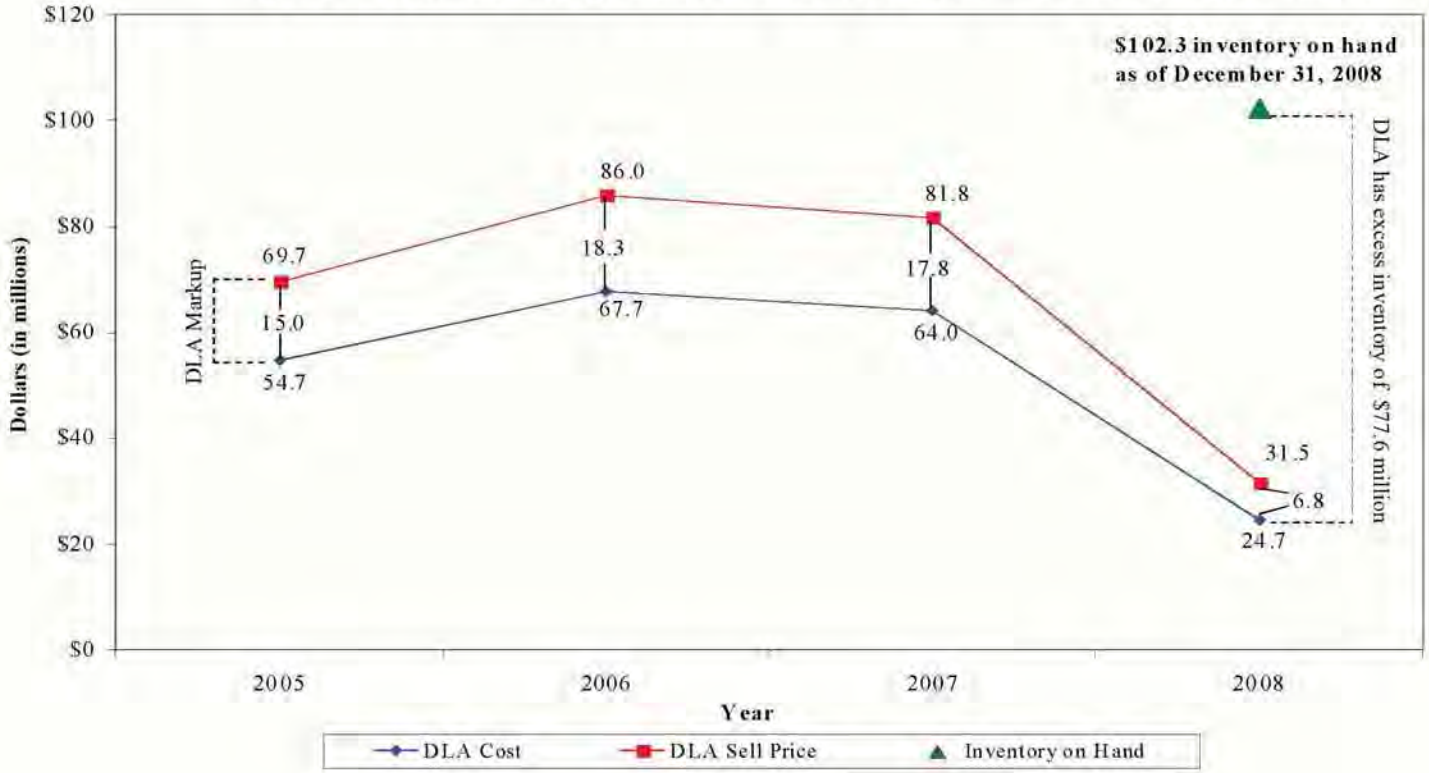
- assess whether the same methodology can be used for excess DLA assets relating to the C-130 aircraft already on contract with Honeywell under Increment 1.

Although we believe that contracting out the DLA mission will decrease effective use of DLA assets, increase excess capacity, and make DLA increasingly more inefficient; the Air Force and DLA have agreed on a reasonable drawdown plan for DLA assets. According to DLA, because the use of performance-based logistics (PBLs) is DOD's preferred method of support, the Deputy Commander, Defense Supply Center Richmond, believes it would be inappropriate for DLA to challenge the Air Force's decision. DLA stated that it is important to gain information on the Services' intent so that DLA personnel can adjust their ordering accordingly and avoid investing in unneeded material.

Issue A. DLA Impact – Sales and Inventory

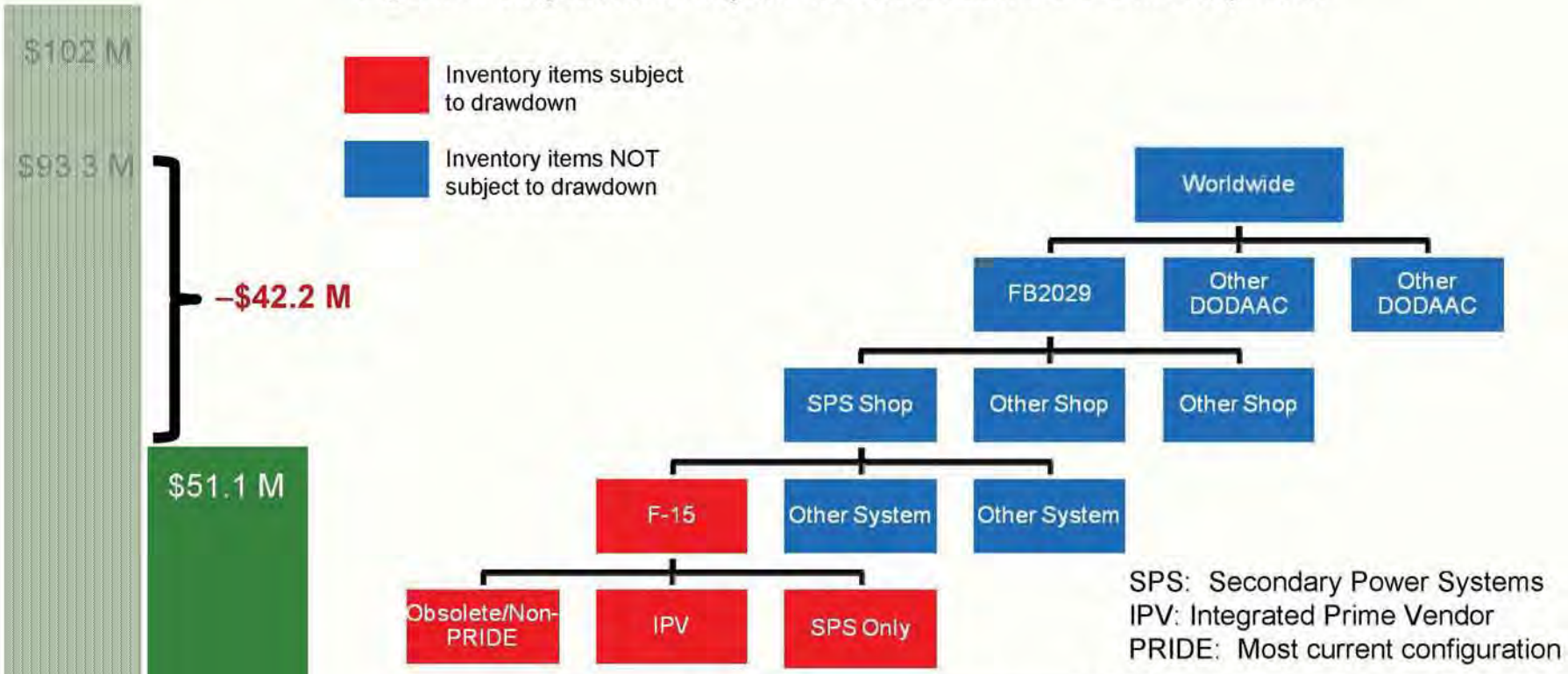
We found that the SPLS contract and the F-15 bearing issue associated with consumable items that were scheduled to transition to the SPLS contract have caused DLA annual sales (requisitions) to drop by about $48 million and caused excess inventory of $60-$80 million for consumable items managed by DLA and used on C-130 and F-15 secondary power systems. Moving consumable items to the SPLS contract will cost DLA about $10 million annually in lost revenue (difference between cost and sell price), as shown in Figure 1.

Figure 1. Annual Requisitions for C-130 and F-15 Consumable Items



Issue A. Air Force/DLA "Team Deep Look" Analysis of F-15 Consumable Item (Figure 2). *(The $102 million represents DLA consumable item inventory to support Worldwide demand for C-130 and F-15 secondary power systems identified by the Office of Inspector General. The $51.1 million drawdown value represents SPLS F-15 specific consumable item inventory and includes the DLA cost recovery rate and the $42.2 million represents other worldwide demand outside SPLS requirements).*

Figure 2. Magnitude of Impact: IG Quick Look vs. Team Deep Look



SPS: Secondary Power Systems
IPV: Integrated Prime Vendor
PRIDE: Most current configuration

# NSNs	Drawdown Quantity	Drawdown Value
507	95,638	$51.1 M

Data provided by DSC-R/QA (01 Mar 2009)

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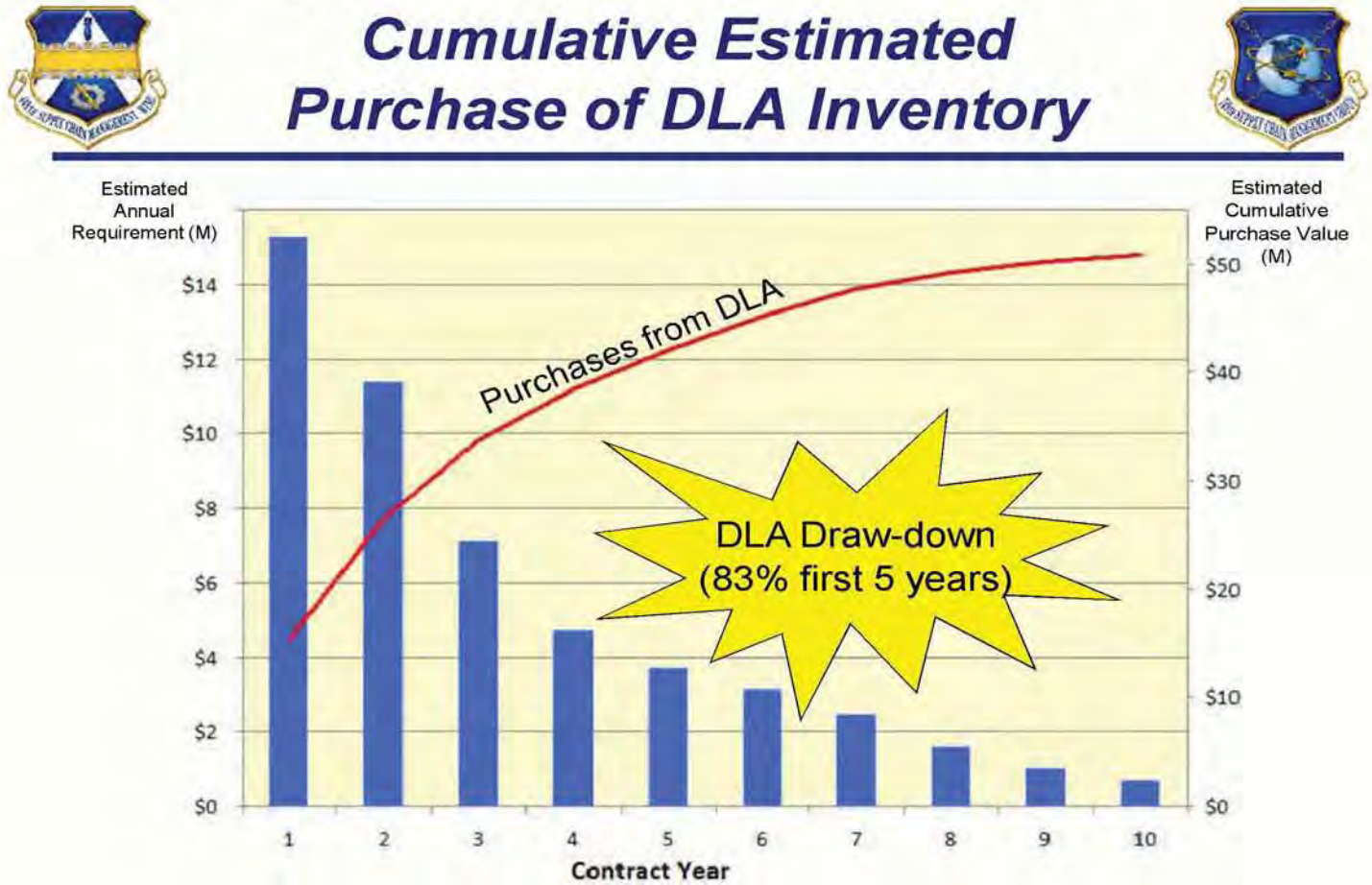
Issue A. Revised Air Force Plans to Use DLA Assets for F-15 Secondary Power Systems (Figure 3). (Honeywell will purchase consumable items from DLA at the DLA sell price as the first source of supply until drawdown is completed).

Figure 3. Air Force and DLA Inventory Drawdown Plan



Data provided by DSC-R/QA

Issue B.1. Statutory Issues – *Prime Vendor Contracts for Depot-Level Maintenance and Repair*

Results. Section 2464, title10, United States Code [10 U.S.C. 2464] note, placed ***conditions on the expansion of functions performed under prime vendor contracts for depot-level maintenance and repair. The law requires that Congress be notified 30 days before the Secretary of Defense or the Secretary of a Military Department enters into a prime vendor contract for depot-level maintenance and repair of a weapons system or other military equipment.***

The Air Force had not complied with 10 U.S.C. 2464 note. The Air Force agreed that the statutory requirements applied to the SPLS strategy and was researching how notification should be made and at what level. The Air Force also stated that there was no Defense Federal Acquisition Regulation Supplement (DFARS) guidance that addressed the requirements.

10 U.S.C. 2464 note, ***placed conditions on the expansion of functions performed under prime vendor contracts for depot-level maintenance and repair as follows:***

(a) Conditions on Expanded Use. The Secretary of Defense or the Secretary of a military department, as the case may be, ***may not enter into a prime vendor contract for depot-level maintenance and repair of a weapon system or other military equipment described in section 2464(a)(3) of title 10, United States Code, before the end of the 30-day period beginning on the date on which the Secretary submits to Congress a report, specific to the proposed contract that—***

(1) describes the ***competitive procedures*** to be used to award the prime vendor contract;

(2) contains an analysis of costs and benefits that demonstrates that use of the prime vendor contract will result in savings to the Government over the life of the contract;

(3) contains an analysis of the extent to which the contract conforms to the requirements of section 2466 of title 10, United States Code; and

(4) describes the measures taken to ensure that the contract does not violate the core logistics policies, requirements, and restrictions set forth in section 2464 of that title.
[emphasis added]

Issue B.2. Statutory Issues – Base Realignment and Closure *2005*

Results. The SPLS contract is not consistent with the BRAC recommendations that transfer procurement management and related support functions for depot-level repairables (DLRs) and supply, storage, and distribution management functions to DLA because the SPLS contract keeps these functions under Air Force control. In addition; supply, storage, and distribution functions for consumable items previously managed by DLA will be re-aligned to contractor management under Air Force control. Consequently, the SPLS contract and other PBL strategies will impact BRAC savings estimates relating to BRAC Recommendation # 176, "Depot-Level Repairable Procurement Management Consolidation," and BRAC Recommendation # 177, "Supply, Storage, and Distribution Management Reconfiguration."

The SPLS strategy and pursuit of similar PBL strategies by the Services will, over time, diminish the joint opportunities for savings relating to consolidating consumable item and procurement management of DLRs and consolidating the service supply, storage, and distribution functions. DLA has not addressed the impact that the Air Force SPLS PBL strategy will have on BRAC recommendations cost and savings estimates. The SPLS strategy should resolve Air Force concerns about the BRAC consolidation actions impact on readiness and depot functions to serve the warfighter, as reported by the Government Accountability Office (GAO).

Recommendation #176, "Depot-Level Repairable Procurement Management Consolidation," The depot-level repairable procurement management and related support functions were disestablished at Hill Air Force Base, Utah, and assigned to the Defense Supply Center Richmond.

Recommendation #177, "Supply, Storage, and Distribution Management Reconfiguration," The supply, storage, and distribution management functions at Hill Air Force Base, Utah, were consolidated with associated inventories at the Ogden Air Logistics Center, Utah under the Defense Distribution Depot, Hill Air Force Base, Utah.

The Supply and Storage Joint Cross Service Group (according to meeting minutes from June 19, 2006) decided in an executive session that not all procurement management functions would transfer to the Defense Logistics Agency. **Specifically, the group decided that contracting for repair will not transfer to the Defense Logistics Agency.**

GAO-09-703, "DOD Needs to Update Savings Estimates and Continue to Address Challenges in Consolidating Supply-Related Functions at Depot Maintenance Locations," July 2009.

- GAO reported that compared to the BRAC Commission's 2005 cost and savings estimates, DOD expects to spend more and save significantly less by implementing the supply-related consolidation actions.

- GAO also reported that the Services were "concerned about the consolidation actions' impact on their inventory levels and how this could potentially affect readiness and depot functions to serve the warfighter" and the pricing structure DLA would use once the recommended BRAC actions were implemented.

- GAO recommended that DOD improve the accuracy of its savings estimates by taking a number of steps, including updating inventory data and removing savings not clearly the result of 2005 BRAC actions.

Issue C. Availability – *On-Time Delivery of Depot-Level Repairables*

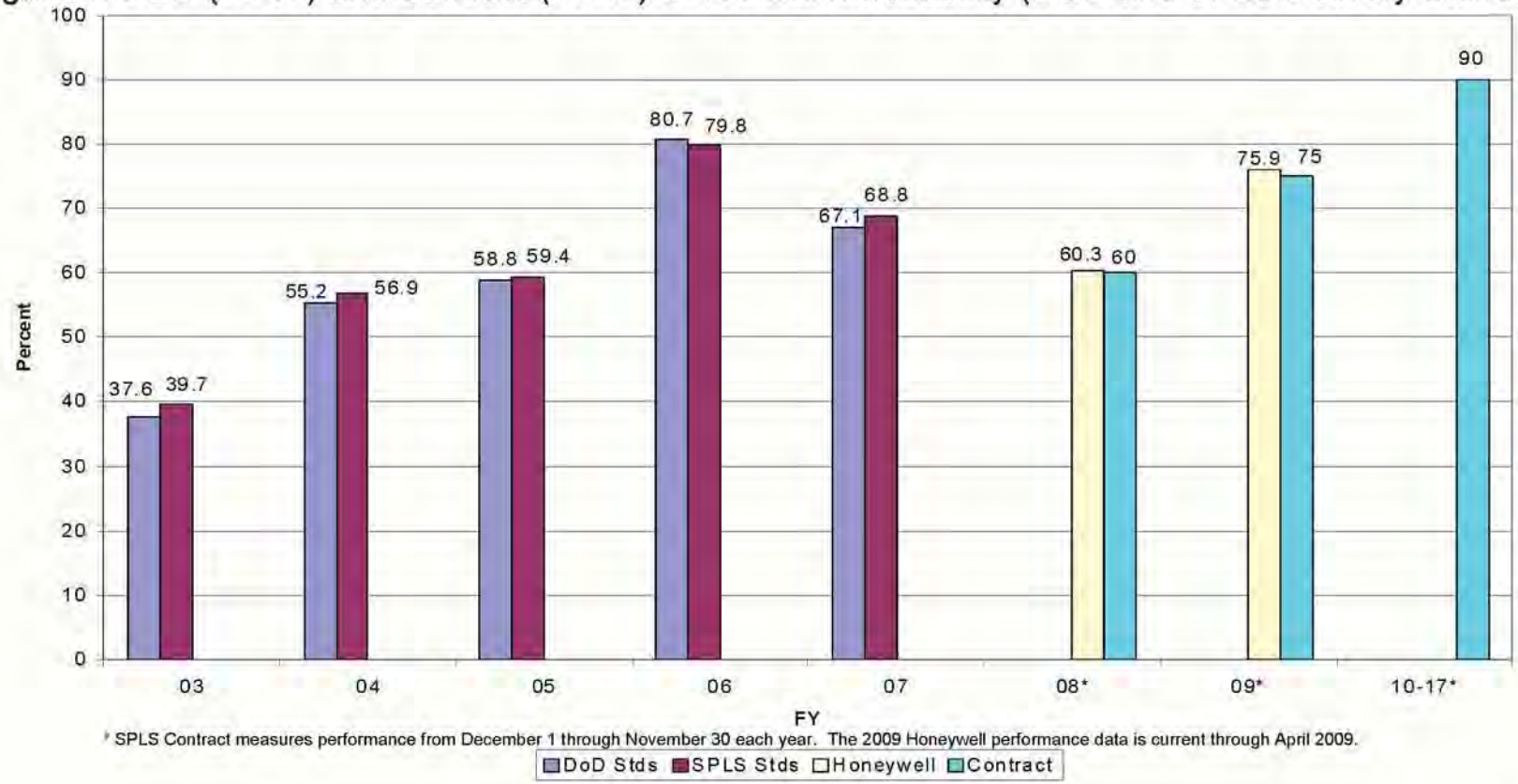
Results. Government availability for the C-130 and F-15 DLRs has been unsatisfactory. We calculated that C-130 DLR availability ranged from 39.7 percent in FY 2003 to 68.8 percent in FY 2007, with a spike of 79.8 percent in FY 2006 (SPLS Increment 1 contract standards). From FY 2003 to FY 2008, availability for F-15 DLRs ranged from 43.0 to 45.8 percent (also using SPLS Increment 1 contract standards) with a spike of 54.9 percent in FY 2007. *It should be noted that a world-wide shortage of bearings significantly impacted repairs and availability and that the Air Force acquisition plan reported on-time deliveries of spares at only 58 and 56 percent in FYs 2003 and 2004.* The SPLS contract Increment 1 requires 90-percent availability starting in year 3 of the contract, and Honeywell achieved availability rates of 60.3 and 75.9 in the first 2 contract years respectively (for the C-130). The Air Force established a 90-percent goal for DLR availability in its business case, but the F-15 contract (Increment 2) has not yet been negotiated.

We found that the Air Force BCA goal to reduce customer wait time (CWT) from 4 days to 2 was not achieved and the availability measurements in the SPLS contract were not consistent with DOD Uniform Material Movement and Issue Priority Standards (DOD Standards). We found that for CWT, the SPLS contract clock starts the first business day (Monday-Friday) after receipt of the requisition by Honeywell as opposed to the date the requisition was issued for DOD requirements, and that the contract performance work statement (PWS) was not consistent with the availability performance requirement. Also, for high-priority requisitions (1-3), DOD generally required faster delivery than SPLS, while for lower priority (4-15) requisitions, SPLS required faster delivery. Finally, the maximum contract penalty for poor performance under Increment 1 (availability at 80 percent or lower) is only $141,825 or less than half a percent of the annual contract value of $36.9 million and will provide only limited incentive to guarantee adequate performance.

Issue C. Availability – Top Customers for C-130/Ground Cart Secondary Power System DLRs

We calculated that for FYs 2003 through 2007, the Air Force/DLA met delivery standards (DOD and SPLS) for DLR requisitions from Kuwait, Qatar, Little Rock, Luke, Eglin, Seymour Johnson, and Mountain Home Air Force Bases (1,649 requisitions) from only 37.6/39.7 percent to 67.1/68.8 percent of the time, with a high of 80.7/79.8 percent in FY 2006. So far, SPLS contract performance (starting in 2008) has been about the same as Government performance for FYs 2006 and 2007. The SPLS contract requires 90-percent availability starting in 2010. See Figure 4 for the comparison of availability standards for the C-130.

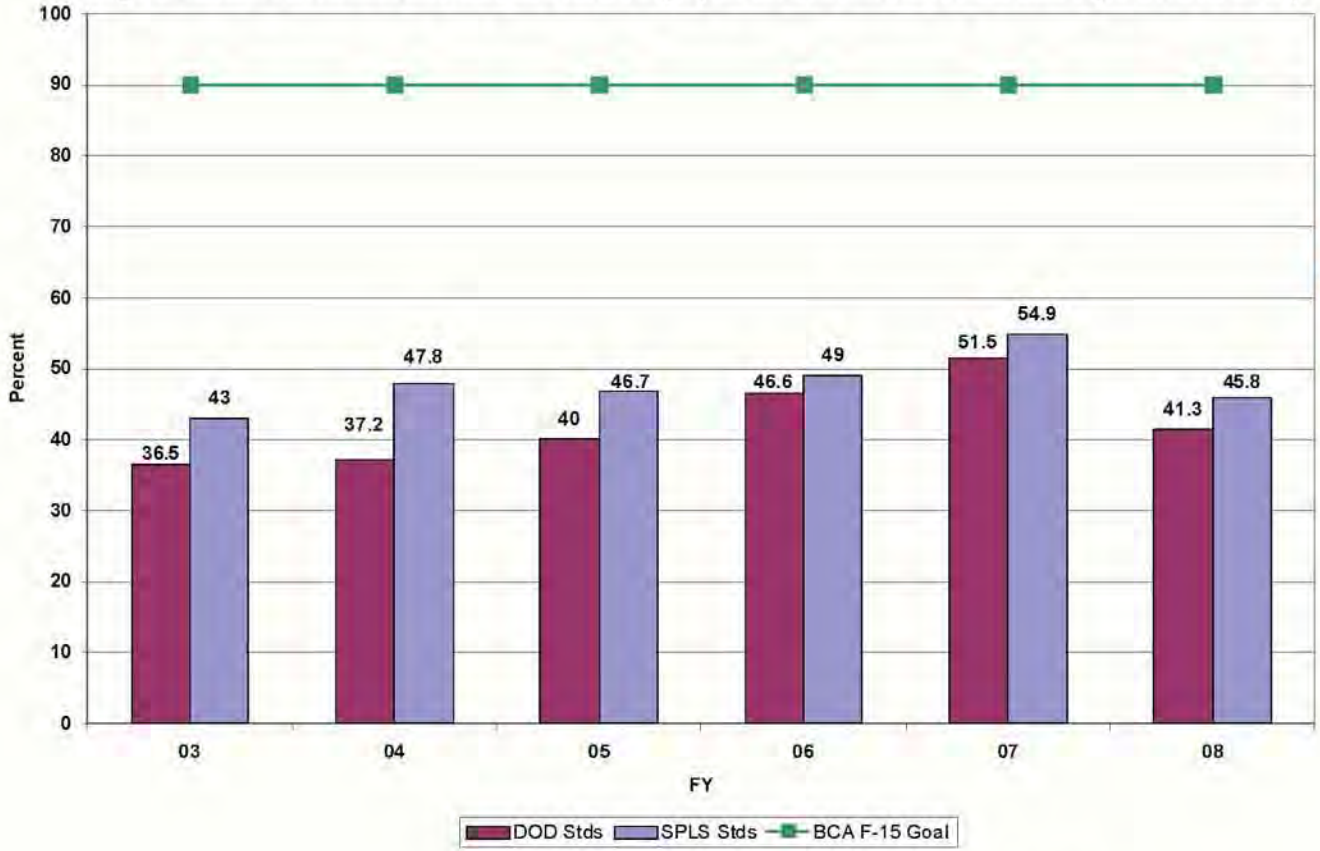
Figure 4. DOD (03-07) and Contract (08-17) C-130 DLR Availability (DOD and SPLS Delivery Standards)



Issue C. Availability – Top Customers for F-15 Secondary Power System DLRs

We calculated that for FYs 2003 through 2008, the Air Force/DLA met delivery standards (DOD and SPLS) for DLR requisitions from Seymour Johnson, Mountain Home, Eglin, and United Kingdom Air Force Bases (6,267 requisitions) only 36.5/43.0 to 41.3/45.8 percent of the time with a high of 51.5/54.9 percent in FY 2007. See Figure 5 for the comparison of availability standards for the F-15.

Figure 5. DOD F-15 DLR Availability (DOD and SPLS Delivery Standards)

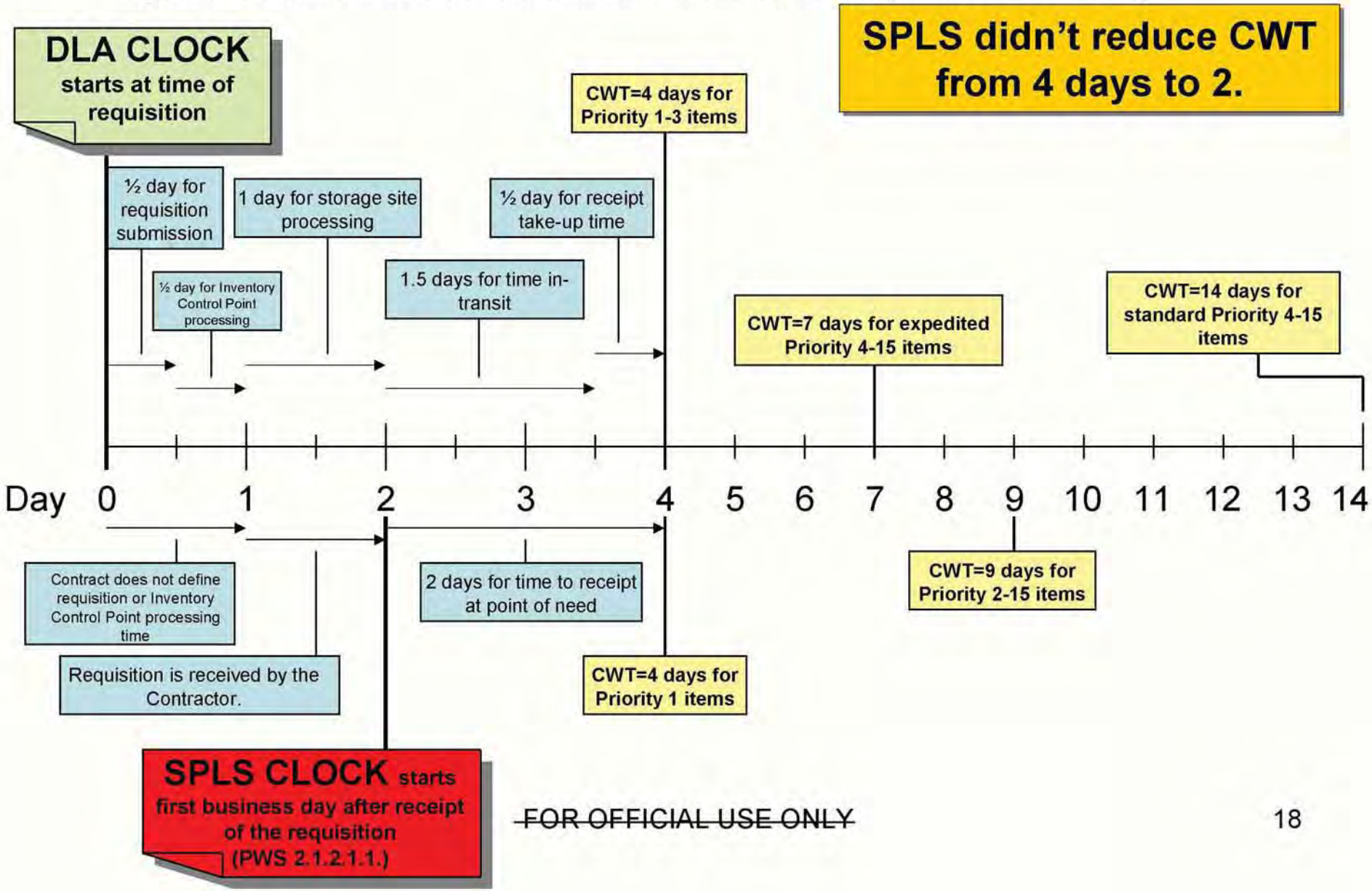


Availability of F-15 DLRs is unsatisfactory

- The Air Force SPLS business case had two primary goals to improve availability. One was to reduce CWT for Continental United States (CONUS) requisitions from 4 days to 2 and the other was to increase material availability from 57-58 percent to 90 percent. *However, SPLS Increment 1 contract did not reduce CWT, and the PWS was inconsistent with the definition and measurement of CWT.*
  - The SPLS PWS defines CWT as the "…total elapsed time between issuance of a customer order and satisfaction of that order" (PWS, Page 80). CWT includes requisition submission time, inventory control point processing, storage site processing/packaging, transit, and receipt time.
  - The SPLS contract availability performance requirement called the "Time to Receipt at Point of Need" measurement "starts the first business day after receipt of the requisition by the contractor" (PWS, Page 10).
- *The SPLS Increment 1 contract requires Honeywell to achieve 60 percent on-time delivery in year 1, 75 percent in year 2, and 90 percent beginning in year 3 and continuing for the duration of the contract.*

Issue C. Availability – CWT for CONUS Requisitions was not reduced from 4 days to 2 when compared to DOD Standards, as shown in Figure 6.

Figure 6. Comparison of DOD and Contract Delivery Standards (Customer Wait Time)



Generally, DOD standards require faster delivery for high-priority requisitions (1-3), and the SPLS contract requires faster delivery for low-priority (4-15) requisitions, as shown in Figure 7.

Figure 7. Comparison of DOD and SPLS Delivery Requirement by Priority

Delivery Requirements
(in Days)

		CONUS		OCONUS[1]		
	Priority	DOD	SPLS[2]	DOD		SPLS[2]
				Express	Regular	
	1	4	4	6.5	12 - 14	7
	2 - 3	4	9	6.5	12 - 14	12
Expedited	4-15	7	9		17 - 19	12
Standard	4-15	14	9		37 - 71	12

DOD and SPLS are about the same
DOD standards require faster delivery
SPLS standards require faster delivery

[1]Outside the Continental United States

[2]We added 2 days to SPLS requirements to account for the functions and time not measured in the availability performance requirement.

Table 1 below states that the maximum contract penalty for poor performance under Increment 1 (availability at 80 percent or lower) is only $141,825 or less than half a percent of the annual contract value of $36.9 million and may not ensure adequate performance. These penalties for poor availability performance were significantly less than those planned in the Air Force business case.

The annual performance penalty is based on the 90 percent acceptable performance level.

Table 1. Comparison of C-130 Performance Penalties for Contract and BCA

Availability	Contract Penalty	BCA Penalty
90%	$0	$0
85%	$39,525	$2,396,389
80% and lower	$141,825	$4,792,770

The maximum contract penalties for availability at 80 percent or lower of $141,825 represent less than 1-half of 1 percent of the annual contract value ($36.9 million)

Issue D. Reliability Improvements

Results. The SPLS Increment 1 contract requires only a 60-percent reliability improvement for 23.3 percent of the APUs (based on the dollar value of the contract) or significantly less than the Air Force business case goal of a 100-percent reliability improvement. Further, based on reliability data from FY 2006 to FY 2008, we calculate that the baseline for the APUs should have been established at 810 Weighted Flight Hours Between Installations (WFHBI) rather than 642 WFHBI. Consequently, the contractual reliability improvements required for Increment 1 amount to only a 26.8 percent improvement for 23.3 percent of the items.

In addition, from 2003 to 2006, the Air Force funded the secondary power system Component Improvement Program (CIP) projects totaling about $8 million with Honeywell that mostly related to the C-5 control system and the F-15 central gearbox clutch and brake and generator control unit (GCU). From 2007-2009, the Air Force funded an additional $5.3 million of design improvements with Honeywell, including about $2.7 million of improvements for the F-15 GCU and more than $1.9 million of improvements to the C-5 APU 165-1 control system. For the F-15 GCU, the Air Force plans on funding the complete replacement of the GCU at a cost of about $20 million after the Increment 2 contract is awarded. This concept of funding major component improvements outside the SPLS contract is contrary to the performance-based logistics concept and will be difficult to manage.

Issue D. SPLS Spiral 1, Increment 1 Reliability Improvement Baseline, Goals, and Improvement

The Air Force Acquisition Summary identified a reliability improvement goal of 100 percent for the C-130 and 34 percent for the B-2 under the SPLS concept. However, the Air Force was unable to achieve the reliability improvement goals in the SPLS Increment 1 contract (see Table 2), and the penalty for missing reliability improvement goals was only $50,000 annually on the $36.9 million annual contact value.

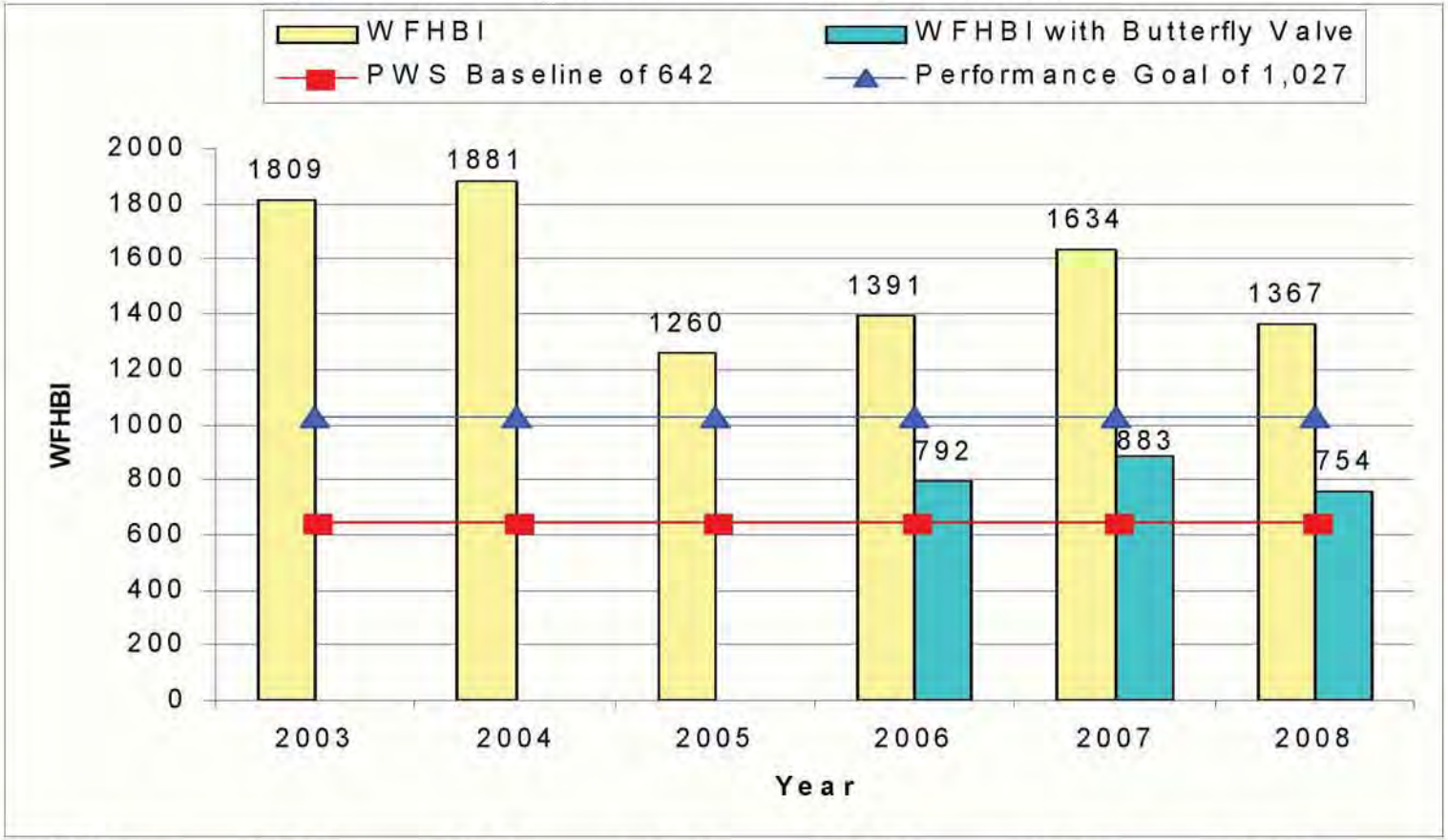
Table 2. Reliability Improvement Baseline, Goals, and Improvement

APU	10-Year Contract Amount (in millions)	Percent	Reliability (WFHBI) Baseline	Goal	Improvement (percent)
C-130:					
85-71	$79.5	22.9	284	284	**0**
85-180L/185LA	86.1	24.8	642	1,027	**60.0**
IG Calculated			*810*		***26.8***
Ground Carts	182.1	52.4	0	0	**0**
B-2	21.3	5.8	640	640	**0**
Total	**369.0**	**100.0***			

* Slight rounding inconsistencies exist because auditor calculations rounded to one decimal place.

Issue D. Reliability for C-130 85-180L/185LA APUs (starting in 2006, the Air Force included the "butterfly valve" in its reliability calculation, lowering the WFHBI metric). See Figure 8 for our analysis of WFHBI.

Figure 8. Reliability for C-130 85-180L/185LA APUs



Flight Hours	258,656	248,348	238,153	222,525	207,466	198,186

The SPLS reliability contract baseline was lower than historical DOD performance.

Issue E.1. SPLS Costs – *SPLS Increment 1 Cost Savings*

Results. Determining whether the Air Force SPLS initiative is less expensive than the status quo is difficult, as is determining whether negotiated prices for the next 10 years are fair and reasonable. In the Increment 1 (B-2, C-130, and carts) final price negotiation memorandum (PNM), the Air Force calculated the SPLS savings from the status quo [redacted] The SPLS contract is a fixed-price, cost-per-flight-hour (CPFH) contract with a base year and 9 (1-year) options. [redacted] Excluding CIP costs and using the same high-level data for FYs 2005, 2006, and 2007; we calculated the 10-year status quo costs at $376.1 million, $355.8 million, and $355.1 million, respectively. When compared to the $369.0 million contract price, our calculations range from a cost savings of $7 million (FY 2005) to a price increase (SPLS contract more expensive) of $13.9 million (FY 2007).

Further, [redacted] a change-in-repair method at the depot from 100-percent overhaul to an overhaul/on-condition maintenance (OCM) mix starting with 100-percent overhaul and gradually increasing OCM (not complete overhaul). This change-in-repair method resulted in a corresponding change from the baseline contract price for depot work of [redacted] or a $58.2 million decrease (34.5 percent). The status quo calculations included 100 percent overhaul. Also, we were unable to determine whether the OCM would impact availability or reliability. In theory, the OCM philosophy could have a positive impact on availability (decreased cycle times) because less costly repairs take less time but not performing complete overhauls could also negatively impact reliability (on-wing performance) so this new repair philosophy will need to be closely monitored. Due to the uncertainty of the status quo calculations and the change in maintenance philosophy, we believe awarding a contract that exceeds 5 years is high risk unless the Air Force develops a plan to re-evaluate future contract costs using certified cost and pricing data.

Issue E.1. SPLS Increment 1 Cost Savings/Increase Range

[redacted] Using FY 2005, 2006, and 2007 data, we calculated that the Air Force savings ranged from about $7.0 million (based on FY 2005 data) to a $13.9 million cost increase for the SPLS contract (based on FY 2007 data), as shown in Table 3.

Table 3. 10-Year Spiral 1 Increment 1 Cost Savings Analysis (in millions)

	Basis	Calculated Status Quo Cost	Negotiated Contract Price	Savings Amount	Savings Percent
Air Force	FY 04-06 Average with CIP	[redacted]	$369.0	[redacted]	[redacted]
DOD OIG*	FY 05 without CIP	$376.0	$369.0	-$7.0	-1.86%
	FY 06 without CIP	$355.8	$369.0	$13.2	3.71%
	FY 07 without CIP	**$355.1**	$369.0	**$13.9**	**3.91%**

*Office of Inspector General

Issue E.1. SPLS Increment 1 – High-Level Historical Costs for C-130 Secondary Power Systems

C-130 secondary power system historical costs were used to calculate the status quo. The tables show that costs were the highest in FY 2004 (used in the Air Force status quo calculation), the first year that significant workload transferred from contract support to the depot support; however, costs then decreased in each year from FY 2005 to 2007. See Tables 4 and 5 for the historical costs of the C-130 and ground carts.

Table 4. C-130 Historical CPFH

Description	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07
Flight Hours	315,619	329,984	318,266	298,537	298,624	279,254
Buy (in millions)	$ 1.306	$ 2.820	$ 1.313	$ 1.633	$ 2.939	$ 0.585
RSP[1] Buy (in millions)	1.133	0.775	1.850	1.862	0.911	0.000
Organic Repair (in millions)	3.035	-1.191	0.025	0.117	0.120	0.047
Depot Repair (in millions)	3.065	7.366	15.945	9.018	10.377	11.193
Contract Repair (in millions)	7.878	10.480	2.656	2.831	1.487	1.072
Less Depot Sales (in millions)	-0.030	-0.110	-0.159	-0.058	-0.076	-0.102
Total C-130 spend	**$16.387**	**$20.140**	**$21.630**	**$15.403**	**$15.758**	**$12.795**
FY 07 Inflator[2]	*1.150*	*1.118*	*1.086*	*1.057*	*1.025*	*1.000*
Total C-130 spend (FY 07)	**$18.837**	**$22.507**	**$23.498**	**$16.277**	**$16.152**	**$12.795**
CPFH (FY 07 dollars)	**$ 59.68**	**$ 68.20**	**$ 73.83**	**$ 54.52**	**$ 54.09**	**$ 45.82**

[1] Readiness Spares Packages

[2] The inflator for FYs 2002 and 2003 were calculated by multiplying the average inflation experienced from FY 2004 through FY 2007 by the preceding inflator.

Table 5. Ground Carts Historical (in millions)

Description	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07
Buy	$ 2.169	$0.519	$ 0.718	$ 0.707	$ 0.000	$ 0.318
Readiness Spare Packages Buy	0.000	0.000	0.229	0.000	0.000	0.000
Organic Repair	0.000	-2.075	-0.036	0.123	0.016	-0.008
Depot Repair	1.670	10.508	9.795	9.247	13.625	14.903
Contract Repair	8.001	0.000	6.087	6.067	1.152	2.162
Less Depot Sales	-0.664	-2.141	-1.402	-1.371	-1.201	-1.459
Total Ground Carts spend	**$11.176**	**$6.811**	**$15.391**	**$14.773**	**$13.592**	**$15.916**
*FY 07 Inflator**	*1.150*	*1.117*	*1.086*	*1.057*	*1.025*	*1.000*
Total Carts spend (FY 07 $)	**$12.847**	**$7.611**	**$16.720**	**$15.611**	**$13.932**	**$15.916**

* The inflator for FYs 2002 and 2003 were calculated by multiplying the average inflation experienced from FY 2004 through FY 2007 by the preceding inflator.

Issue E.2. SPLS Costs – *SPLS Increment 2 Calculated Cost Savings*

Results. Similar to the Increment 1 analysis, determining status quo costs and potential savings from the sole-source Increment 2 PBL contract for logistics services and depot maintenance support of F-15 secondary power systems is difficult. The Air Force calculated as a baseline for negotiations that the SPLS Increment 2 contract will save the same amount as the Increment 1 contract, [redacted] from the [redacted] status quo calculation, and the [redacted] The Air Force included [redacted] for "Backorder Buydown" to fill all backorders. The Air Force then added [redacted] associated with the DLA cost recovery rate for the inventory buydown for a total Increment 2 contract cost of [redacted] or a savings of [redacted].

However, the Air Force status quo calculation was based on an average CPFH for FYs 2006-2008 with additional adjustments for cost increases associated with FY 2008. FY 2008 was the first year that significant F-15 workload transferred from contract support to depot support. We believe it's difficult to make the assumption that costs are trending up based on the FY 2008 data. For the C-130, costs increased significantly the first year work was transferred to the depot but then steadily decreased over the next 3 years. Consequently, we prepared status quo calculations for FYs 2006, 2007, 2008, and also one for the first 3 quarters of FY 2009 that shows the status quo [redacted] less than the Air Force PBL contract calculation of [redacted] We also included the Air Force backorder buydown of [redacted] in our calculations.

Issue E.2. SPLS Increment 2 (F-15) Calculated Cost Savings

The Air Force calculated that the Increment 2 contract will save the same amount as the Increment 1 contract, [redacted] status quo calculation, and the 10-year Increment 2 contract would cost [redacted] The Air Force then added [redacted] associated with the DLA cost recovery rate for the inventory buydown for a total SPLS Increment 2 contract cost of [redacted] or a savings of [redacted] for the status quo. We calculated the status quo using historical data for FYs 2006, 2007, 2008, and the first 3 quarters of FY 2009. The data show the status quo to be significantly less than the Air Force calculation. Using our calculations, the SPLS contract would cost [redacted] more than the status quo (See Table 6).

Table 6. 10-Year Spiral 1 Increment 2 Cost Savings Analysis ($millions)

	Historical Cost Basis	Status Quo[1]	Air Force PBL Calculation	Savings Amount	Savings Percent
Air Force	FY 2006-2008 (average)	[redacted]	[redacted]	[redacted]	[redacted]
DOD OIG[3]	FY 2006	$425.4	[redacted]	[redacted]	[redacted]
	FY 2007	$418.8	[redacted]	[redacted]	[redacted]
	FY 2008	$442.8	[redacted]	[redacted]	[redacted]
	FY 2009 (3 qtrs)	**$411.8**	[redacted]	[redacted]	[redacted]

1 Includes a buydown of [redacted] of backorders in 2010 and 2011 that will achieve 100 percent availability of parts. The inclusion of these costs hinges on the negotiation of this requirement in the pending award.

[redacted]

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Issue E.2. SPLS Increment 2 – High-Level Historical Costs for F-15 Secondary Power Systems

F-15 secondary power system historical costs used for the status quo calculation were highest in FY 2008, the first year that significant workload transferred from contractor support to depot support. Data for the first 3 quarters of FY 2009 show that costs may be trending down, similar to the C-130 program.

[redacted] See Table 7 for the F-15 historical costs.

Table 7. F-15 Historical CPFH

Description	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09 (3 quarters)
Buy (power take-off shaft new buys) (in millions)							$ -5.499
Buy (in millions)	$ 3.674	$ 3.148	$ 2.614	$ 6.278	$ 5.337	$ 2.786	6.048
Readiness Spares Packages Buy (in millions)	0.547	0.000	0.759	0.000	0.000	0.000	0.000
Total F-15 Buys	**$ 4.221**	**$ 3.148**	**$ 3.373**	**$ 6.278**	**$ 5.337**	**$ 2.786**	**$ 0.549**
Organic Repair (in millions)	0.864	-0.550	0.176	0.175	0.156	0.072	0.194
Depot Repair (in millions)	15.707	31.404	23.756	38.544	31.014	42.877	51.292
Contract Repair (in millions)	41.975	27.454	28.787	19.824	25.484	9.031	0.896
Less Depot Sales (in millions)	0.000	0.000	0.000	0.000	0.000	0.000	-12.107
Less power take-off shaft repairs (in millions)							-0.100
Total F-15 Repair Spend	**$58.546**	**$58.308**	**$52.719**	**$58.543**	**$56.654**	**$51.979**	**$40.174**
Weighted Inflation	*0.862*	*0.880*	*0.904*	*0.932*	*0.957*	*0.980*	*0.0000*
Total F-15 Buys (FY 2009 $)	**$4.895**	**$ 3.579**	**$ 3.730**	**$ 6.734**	**$ 5.574**	**$ 2.841**	**$ 0.549**
Total F-15 Repair Spend (FY 2009 $)	**$67.892**	**$66.291**	**$58.304**	**$62.798**	**$59.174**	**$53.019**	**$40.174**
Flying Hours	*193,819*	*189,230*	*167,553*	*167,224*	*158,381*	*128,485*	*101,389*
CPFH $-Buys (FY 2009 $)	**$ 25.26**	**$ 18.91**	**$ 22.26**	**$ 40.27**	**$ 35.20**	**$ 22.11**	**$ 5.42**
CPFH $-Repair Spend (FY 2009 $)	**$350.29**	**$350.32**	**$347.97**	**$375.53**	**$373.62**	**$412.65**	**$396.23**

Issue F. Congressional Inquiry - *Bundling*

Results. On July 20, 2009, during our project, the DOD Inspector General received a congressional inquiry relating to bundling requirements under the SPLS contract. As part of its acquisition strategy, the Air Force performed market research to address the impact on small businesses from bundling the requirements under the SPLS contract. The Air Force market research concluded that there would be minimal impact on the small business community as almost all items were sole-source to Honeywell. The Air Force also concluded that there were measurably substantial benefits to bundling the requirements to include monetary savings, increased performance and reliability of APUs, improved quality, and increased depot capabilities. However, the extent of the measurably substantial benefits that the Air Force was able to achieve on the contract is significantly less than planned.

In addition, the Air Force Senior Procurement Executive (SPE) has not yet determined that the consolidation of requirements was necessary and justified as required by the United States Code and regulations. This occurred because Air Force policy is not consistent with the established guidance and permits the delegation of this determination to the Deputy or Associate Deputy Assistant Secretary (Contracting).

We found that the bundling guidance in the acquisition regulations is not consistent with the legislation regarding the definition of substantial bundling. Specifically, the legislation requires the head of the contracting agency to determine if substantial bundling exists, but the criteria set forth in the regulations for substantial bundling is based on the dollar values of consolidated actions.

Issue F. Congressional Inquiry - Bundling

On July 20, 2009, Congresswoman Jackie Speier forwarded a complaint to the DOD Inspector General from a constituent claiming that the SPLS contract is harming his business and preventing competition on maintenance, repair, and overhaul services.

The Air Force market research determined that 100 percent of end items and line replaceable units and 95.3 percent of support items were sole-source to Honeywell. Further, Honeywell's subcontractor plan for the SPLS contract includes 55 percent Tier II small business participation. As a result, minimal impact on the small business community was expected. The Air Force concluded that alternative approaches to the SPLS contract were considered less viable because they will not achieve material availability, costs, and cycle time goals. Therefore, the contracting officer determined, based on the derived substantial benefits, that bundling is justified for SPLS.

The Air Force BCA estimated that the bundled SPLS requirements would result in measurably substantial benefits and achieve monetary savings ranging from $155.3 million to $224 million over 10 years. In addition, the Air Force expects to receive other benefits, such as increased performance and reliability of APUs, improved quality, and increased depot capabilities. The Air Force also determined that the acquisition lead time would be reduced from 132 days to 20 for these items. **Our analysis shows that while the contract requirements do provide for better availability, lower costs and any reliability improvements are questionable.**

Issue F. Congressional Inquiry - Bundling Guidance

The Air Force Contracting Determination stated that, "Based upon the Consolidation Findings and the substantial benefits derived from the acquisition strategy, consolidation is necessary and justified." The approval of the consolidation determination was accomplished by coordinating the Commodity Acquisition Management Plan in accordance with Air Force Federal Acquisition Regulation Supplement (AFFARS) 5307.170-3, "Policy and Procedures."

According to AFFARS 5307.170-3, "**the SPE has delegated the authority** to make the consolidation determination for actions $100 million or greater to the Deputy Assistant Secretary (Contracting) and the Associate Deputy Assistant Secretary (Contracting)." **[emphasis added]**

However, the United States Code (U.S.C.) and DFARS guidance does not permit the delegation of this requirement by the SPE. The Federal Acquisition Regulation (FAR) is unclear regarding the delegation of authority.

- 10 U.S.C 2382, "Consolidation of contract requirements: policy and restrictions," requires the **SPE** to determine that the consolidation is necessary and justified based on the benefits of the strategy.

- DFARS 207.170-3, "Policy and Procedures," requires the SPE to determine that the consolidation is necessary and justified for contracts exceeding $5.5 million.

- FAR Subpart 7.107, Paragraph (c), "Additional Requirements for Acquisitions Involving Bundling," states that "**Without the power of delegation**, the service acquisition executive for the military departments. . . may determine that bundling is necessary and justified" when the expected benefits do not derive measurably substantial benefits in accordance with thresholds established in paragraph (b) (5 percent of the estimated contract value if the value exceeds $86 million) and the acquisition strategy provides for maximum practicable participation by small business concerns. **[emphasis added]**

The SPE needs to make a determination as to whether consolidation for the SPLS strategy is necessary and justified.

Issue F. Congressional Inquiry - Bundling Guidance

The bundling guidance in the acquisition regulations is not consistent with legislation. One example of a disconnect relates to substantial bundling in the U.S.C and FAR as discussed below.

- 15 U.S.C 644, "Awards or Contracts," permits the head of a contracting agency to determine whether a proposed strategy for a procurement involves a substantial bundling of requirements.
- FAR 7.107, "Additional Requirements for Acquisitions Involving Bundling," defines substantial bundling for DOD as any bundling for a contract or order valued at $7.5 million or more.

Another disconnect exists in establishing consolidation or bundling thresholds as discussed below.

- 10 U.S.C 2382, "Consolidation of contract requirements; policy and restrictions," establishes that a contract strategy cannot be executed that includes consolidation of requirements for contracts valued at $5 million or more unless the SPE conducts market research; identifies alternative contracting approaches that involve a lesser degree of consolidation; and determines that the consolidation is necessary and justified.
- FAR 7.107 does not discuss a dollar threshold other than the $7.5 million for substantial bundling.
- DFARS 207.170-3, "Policy and Procedures," establishes an estimated consolidated contract requirement of $5.5 million for SPE involvement.

However, basing a determination of substantial bundling on the dollar value of a contract that bundles two or more requirements is arbitrary and does not consider the actual impact on small businesses. For example, if one company was the sole-source for 99 percent of the requirements and another company had the other 1 percent and the total award was greater than $7.5 million, that would meet the FAR definition of substantial bundling. However, we question whether substantial bundling exists as the impact on small businesses would be nominal. Thus, we believe that the acquisition regulations should be clarified to ensure that more focus is placed on the actual impact on small businesses.