Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force										DATE: February 2010	

APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*					R-1 ITEM NOMENCLATURE PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*						

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	3.124	6.279	3.055	0.000	3.055	3.100	3.148	3.195	3.242	Continuing	Continuing
674667: *Global Command and Control System - AF*	3.124	6.279	3.055	0.000	3.055	3.100	3.148	3.195	3.242	Continuing	Continuing

Note

In FY 2010, $3.200M of 4667 Global Command and Control System - Air Force effort will be transferred to PE 0604740F, Integrated Command and Control Applications (IC2A), 2524 Reuse and Component Support in accordance with Congressional intent.

A. Mission Description and Budget Item Justification

The Global Command and Control System (GCCS) is the Joint Command and Control (C2) System of Record and the designated C2 migration system for the DOD. It is an integrated Command, Control, Communications, Computer, and Intelligence (C4I) system capable of supporting all echelons of the US military command structure. GCCS solves C4I interoperability problems between Service components by establishing a Common Core Operating Environment supporting net-centric objectives. The GCCS-Air Force program provides C2, intelligence, surveillance, reconnaissance (ISR) and operational information for the Joint Force Air Component Commander (JFACC) and the Air and Space Operations Center-Weapon System (AOC-WS) for planning and execution, air space deconfliction, targeting, weaponeering and many other applications supporting air operational command and control, and fully supports the Aerospace Expeditionary Force (AEF) concept. The Air Force is responsible for integration of Air Force unique applications with the Common Core Operating Environment. Integration efforts are directed towards future aerospace C2 concepts supporting requirements for the AOC, including ISR, and intended to automate operational systems with an objective of providing the right people with the right information at the right time while reducing the overall footprint of the system. As they migrate to the GCCS Joint (GCCS-J) core environment, GCCS-AF will integrate applications into the WINx environment satisfying warfighter requirements for the Common Operational Picture (COP), Joint Warning and Reporting Network (JWARN), Joint Targeting Toolbox (JTT), Logistics Feasibility Analysis Capability (LOGFAC), Deliberate Crisis Action Planning and Execution Segment (DCAPES) capabilities and other information assurance mechanisms. Activities also include studies and analysis to support both current program planning and execution and future program planning.

The GCCS-AF program is actively supporting planning for transition of functionality to DOD's emerging next generation joint C2 enabler. The GCCS-AF funding will be used to implement evolving Joint and Air Force GCCS functional capability as well as facilitate transition, development and delivery of functionality to DOD's next generation joint C2 enabler.

Air Force

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*

This effort is Budget Activity 7, Operational System Development, because the program develops and implements software upgrades for integrating existing operational systems and computer networks that will eventually evolve to the DOD's next generation joint C2 enabler riding on the Global Information Grid.

Due to an inadvertent error the Air Force requests a technical adjustment transferring $2.157M in FY2011 from PE 0303158F, R-1 Line No. 179 "Joint Command and Control Program (JC2)" to PE 0303150F, R-1 Line No. 178 "Global Command and Control System (GCCS)."

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	3.124	3.149	0.000	0.000	0.000
Current President's Budget	3.124	6.279	3.055	0.000	3.055
Total Adjustments	0.000	3.130	3.055	0.000	3.055
• Congressional General Reductions		-0.070			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		3.200			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	3.055	0.000	3.055

Congressional Add Details ($ in Millions, and Includes General Reductions)

	FY 2009	FY 2010
Project: 674667: *Global Command and Control System - AF*		
Congressional Add: *The FY 2010 $3.2M Congressional Add for Command and Control Service Level Management (C2SLM). This reprogramming action executes in accordance with Congressional intent.*	0.000	3.130
Congressional Add Subtotals for Project: 674667	0.000	3.130
Congressional Add Totals for all Projects	0.000	3.130

Change Summary Explanation

The FY 2010 $3.2M Congressional Add for Command and Control Service Level Management (C2SLM) program will be reprogrammed to the Integrated Command and Control Applications (IC2A) program (PE 0604740F). This reprogramming action executes in accordance with Congressional intent.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force										DATE: February 2010	

APPROPRIATION/BUDGET ACTIVITY
3600: *Research, Development, Test & Evaluation, Air Force*
BA 7: *Operational Systems Development*

R-1 ITEM NOMENCLATURE
PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*

PROJECT
674667: *Global Command and Control System - AF*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
674667: *Global Command and Control System - AF*	3.124	6.279	3.055	0.000	3.055	3.100	3.148	3.195	3.242	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

In FY 2010, $3.200M of 4667 Global Command and Control System - Air Force effort will be transferred to PE 0604740F, Integrated Command and Control Applciations (IC2A), 2524 Reuse and Component Support in accordance with Congressional intent.

A. Mission Description and Budget Item Justification

The Global Command and Control System (GCCS) is the Joint Command and Control (C2) System of Record and the designated C2 migration system for the DOD. It is an integrated Command, Control, Communications, Computer, and Intelligence (C4I) system capable of supporting all echelons of the US military command structure. GCCS solves C4I interoperability problems between Service components by establishing a Common Core Operating Environment supporting net-centric objectives. The GCCS-Air Force program provides C2, intelligence, surveillance, reconnaissance (ISR) and operational information for the Joint Force Air Component Commander (JFACC) and the Air and Space Operations Center-Weapon System (AOC-WS) for planning and execution, air space deconfliction, targeting, weaponeering and many other applications supporting air operational command and control, and fully supports the Aerospace Expeditionary Force (AEF) concept. The Air Force is responsible for integration of Air Force unique applications with the Common Core Operating Environment. Integration efforts are directed towards future aerospace C2 concepts supporting requirements for the AOC, including ISR, and intended to automate operational systems with an objective of providing the right people with the right information at the right time while reducing the overall footprint of the system. As they migrate to the GCCS Joint (GCCS-J) core environment, GCCS-AF will integrate applications into the WINx environment satisfying warfighter requirements for the Common Operational Picture (COP), Joint Warning and Reporting Network (JWARN), Joint Targeting Toolbox (JTT), Logistics Feasibility Analysis Capability (LOGFAC), Deliberate Crisis Action Planning and Execution Segment (DCAPES) capabilities and other information assurance mechanisms. Activities also include studies and analysis to support both current program planning and execution and future program planning.

The GCCS-AF program is actively supporting planning for transition of functionality to DOD's emerging next generation joint C2 enabler. The GCCS-AF funding will be used to implement evolving Joint and Air Force GCCS functional capability as well as facilitate transition, development and delivery of functionality to DOD's next generation joint C2 enabler.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	**PROJECT** 674667: *Global Command and Control System - AF*

This effort is Budget Activity 7, Operational System Development, because the program develops and implements software upgrades for integrating existing operational systems and computer networks that will eventually evolve to the DOD's next generation joint C2 enabler riding on the Global Information Grid.

Due to an inadvertent error the Air Force requests a technical adjustment transferring $2.157M in FY2011 from PE 0303158F, R-1 Line No. 179 "Joint Command and Control Program (JC2)" to PE 0303150F, R-1 Line No. 178 "Global Command and Control System (GCCS)."

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Synchronization of current capabilities and planning for infrastructure migration to the next generation joint C2 architecture.	3.124	3.149	5.212	0.000	5.212

FY 2009 Accomplishments:
In FY 2009:   Continued integration of Air Force capabilities into GCCS (COP, DCAPES, ATO Reader, Joint Defensive Planner (JDP), Joint Targeting Toolbox (JTT)), prototyping software development, and supporting GCCS migration. Developed and fielded incremental software/ infrastructure components necessary to support consolidation to common GCCS-J baseline for installed configurations.

FY 2010 Plans:
In FY 2010:   Continued integration of Air Force capabilities into GCCS baseline configurations. Conduct C2 interoperability and performance studies in support of further consolidation of GCCS Global Release (GR) and Strategic Server Enclave (SSE) configurations. Assess and mitigate risks associated with transforming enterprise infrastructure components necessary for structured migration of GCCS baseline to the DOD's emerging joint C2 architecture. NOTE: FY10 estimate reflects an additional $3.13M (rounded to $3.2M) to be reprogrammed for another program element in accordance with Congressional intent.

FY 2011 Base Plans:
In FY 2011:   Planned continued engineering support to GCCS synchronization and migration objectives. Conduct studies and analysis to develop stronger configuration control and security

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	PROJECT 674667: *Global Command and Control System - AF*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
protection strategies. Strengthen configuration management, performance engineering and security protection strategies to facilitate migration to the DOD's emerging joint C2 architecture. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
In: FY 2010: $3.2M Congressional Add for Command and Control Service Level Management (C2SLM) program wil be reprogrammed (technical adjustment requested) to the Integrated Command and Control Appl... *FY 2009 Accomplishments:* In FY 2011: N/A *FY 2010 Plans:* In FY 2011 OCO: N/A *FY 2011 Base Plans:* In FY 2011: Not Applicable. *FY 2011 OCO Plans:* In FY 2011 OCO: Not Applicable.	0.000	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	3.124	3.149	5.212	0.000	5.212

	FY 2009	FY 2010
Congressional Add: The FY 2010 $3.2M Congressional Add for Command and Control Service Level Management (C2SLM). This reprogramming action executes in accordance with Congressional intent.	0.000	3.130

Air Force

Exhibit R-2A, **RDT&E Project Justification:** PB 2011 Air Force		**DATE:** February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	**PROJECT** 674667: *Global Command and Control System - AF*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010
FY 2009 Accomplishments: In FY 2009: N/A *FY 2010 Plans:* In FY 2011 OCO: Not Applicable.		
Congressional Adds Subtotals	0.000	3.130

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0303150F: *Air Force Global Command and Control System, (OPAF)*	8.661	9.881	9.210	0.000	9.210	17.583	13.583	13.780	14.004	0.000	0.000
• PE 0303150F (1): *Air Force Global Command and Control System, (O&M)*	38.170	40.183	40.832	0.000	40.832	44.472	44.717	45.578	46.771	0.000	0.000

D. Acquisition Strategy

 GCCS-AF is developed and fielded using a spiral acquisition approach, synchronized with Common Operating Environment (COE) and compliant with the GCCS-Joint (GCCS-J) baseline. All deployment of GCCS-AF capabilities are synchronized with the GCCS-J program fielding schedule, which is led by DISA. The GCCS-AF program is actively supporting DOD planning for transition of functionality to DOD's emerging next generation joint C2 enabler.

E. Performance Metrics

 Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Air Force

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force	DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	PROJECT 674667: *Global Command and Control System - AF*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
WINxB	SS/FFP	Northrop Gruman ITS Herndon, VA	1.750	2.000	Nov 2009	3.480	Nov 2010	0.000		3.480	Continuing	Continuing	0.000
Subtotal			1.750	2.000		3.480		0.000		3.480			0.000

Remarks

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Systems Engineering Support	FFRDC	Mitre / ESC Hanscom AFB, MA	0.865	0.600	Oct 2009	1.200	Nov 2010	0.000		1.200	Continuing	Continuing	0.000
Miscellaneous	Various	Various Various	0.195	0.249	Oct 2009	0.200		0.000		0.200	Continuing	Continuing	0.000
Subtotal			1.060	0.849		1.400		0.000		1.400			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	**PROJECT** 674667: *Global Command and Control System - AF*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Accreditation	MIPR	Various Various	0.314	3.430	Oct 2009	0.332	Nov 2010	0.000		0.332	Continuing	Continuing	0.000
Subtotal			0.314	3.430		0.332		0.000		0.332			0.000

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	3.124	6.279		5.212		0.000		5.212			0.000

Remarks
   Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, **RDT&E Schedule Profile:** PB 2011 Air Force | **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	674667: *Global Command and Control System - AF*

Air Force

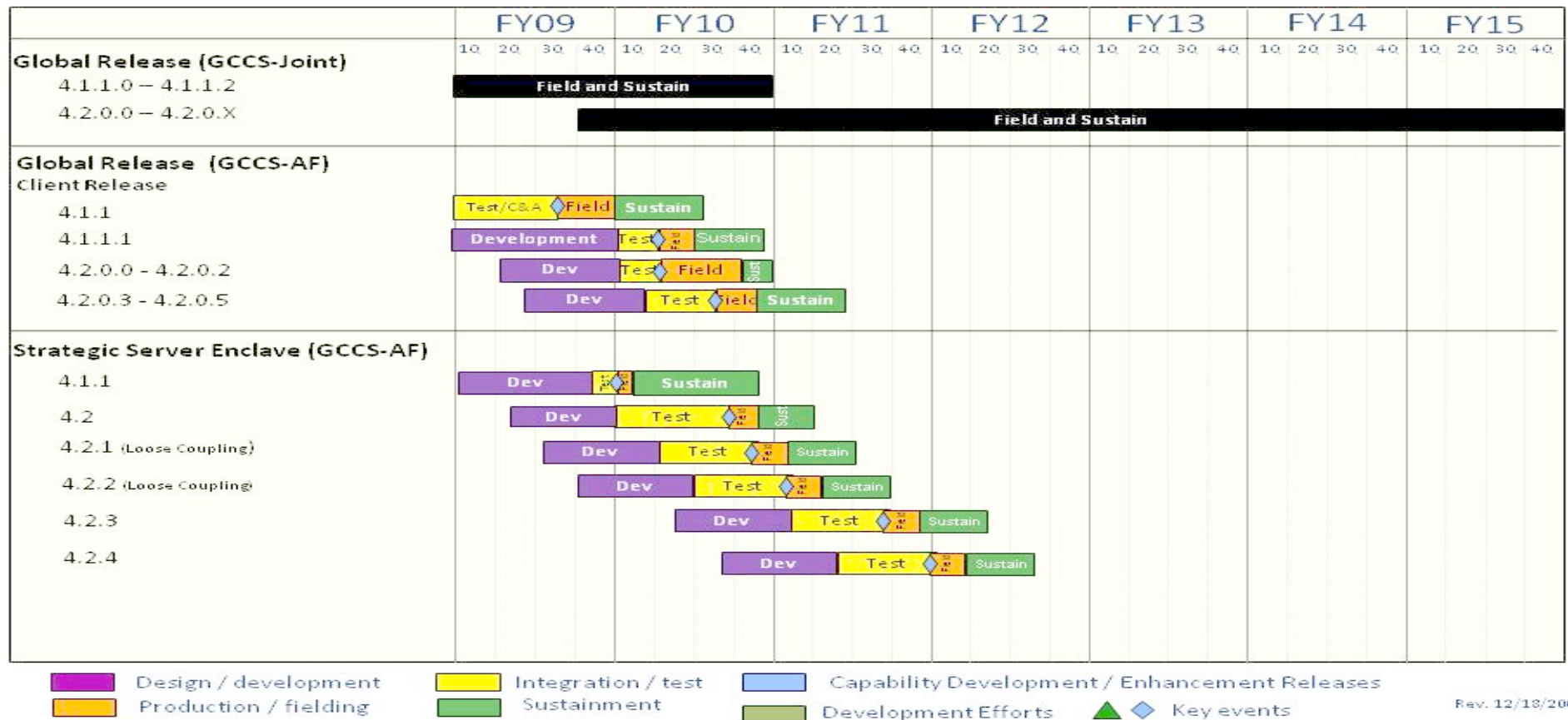| Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150F: *WWMCCS/GLOBAL COMMAND & CONTROL SYSTEM*	**PROJECT** 674667: *Global Command and Control System - AF*

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
GCCS-AF v4.1.1: Global Release Joint (GR-J) - Fielding	1	2009	4	2010
GCCS-AF v4.2: GR-J - Fielding	4	2009	4	2011
GCCS-AF 4.1.1: GR-C - Testing/Fielding	1	2009	3	2010
GCCS-AF 4.1.1.1: GR-C - Development/Testing/Fielding	1	2009	4	2010
GCCS-AF 4.2.0.0: GC-C - Development/Testing/Fielding	2	2009	4	2010
GCCS-AF 4.2.0.3: GR-C - Development/Testing/Fielding	3	2009	2	2011
GCCS-AF 4.1.1 SSE - Development/Testing/Fielding	1	2009	4	2010
GCCS-AF 4.2 SSE - Development/Integration/Testing/Fielding	2	2009	1	2011
GCCS-AF 4.2.1 SSE - Loose Coupling: Dev/Test/Fielding	3	2009	2	2011
GCCS-AF 4.2.2 SSE - Loose Coupling: Dev/Test/Fielding	4	2009	3	2011
GCCS-AF 4.2.3 SSE - Development/Integration/Testing/Fielding	3	2010	4	2011