

PBP Example for a Hardware Production Program

Overview:

The government intends to procure a total of 60 production aircraft over a period of several years. The aircraft has already gone through separate development, with a total of 5 prototype aircraft being acquired under an RDT&E program. The prototype aircraft have been through the DT&E and OT&E phases, and a final production configuration has been established. Production of the 60 aircraft will take place under a multiple-year production program, including advance procurement requirements. The optimal lot size for a production buy is 15 aircraft per year. The total procurement requirement is budgeted to be completed in four years. The first production lot buy will be accompanied by a concurrent nonrecurring effort that is intended to assess the structural life of the main airframe. This testing is to be performed using (as government-furnished property) one of the airframes built during the program's development phase. Before production can begin, the contractor will have to place orders for long lead items and will have to fabricate final tooling sufficient to support a production rate of two aircraft per month.

The prices agreed to for the recurring and non-recurring activities to take place under the contract are as follows:

Production Lots:

CLIN	Lot #	# of Aircraft	Unit Price	Total Price
0001	1	15	\$10,000,000	\$150,000,000
0004 (option)	2	15	\$9,750,000	\$146,250,000
0005 (option)	3	15	\$9,600,000	\$144,000,000
0006 (option)	4	15	\$9,500,000	\$142,500,000

Non-Recurring Activities:

CLIN	Description	Price
0002	Fabricate production tooling	\$15,000,000
0003	Perform airframe life tests	\$10,000,000

Performance Events:

As a part of the contract negotiation process, the parties defined a series of six events or accomplishments that would be used as PBP payments for the aircraft production activities on a per-aircraft basis and another set of four events for each of the non-recurring activities. In addition, for each PBP event agreed upon, the parties also established the manner in which the accomplishment of each PBP payment event would be determined and the value that each event would have for contract financing purposes. A liquidation rate of 90% was established for all final aircraft deliveries within a given production lot until all aircraft in each lot were delivered and accepted. Upon successful completion of each of the two non-recurring activities, all prior PBPs for those activities would be fully liquidated at the time when final payments for those specific activities are made. The PBP event definitions, accomplishment metrics, and values are set forth as attachments to the contract as shown on the following pages.

Performance-Based Payments — Aircraft

(Recurring events on a per-aircraft basis)

Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value (stated as % of item unit price)
1	S	Rough machining of main landing gear bulkhead frames	Completion of one set of four main landing gear bulkhead frames through the initial numerically controlled machining stage.	Floor check performed by DCMA representative to ensure rough machining has been completed.	10%
2	S	Receipt of aft pressure bulkhead details	Ninety-five percent (95%) of the details received for the aft pressure bulkhead.	Verification through inventory check and documentation review by DCMA representatives.	15%
3	S	Completion of wing spars	Wing spars moved out of assembly tooling and 95% of the planned standards completed.	Event assembly order signed and stamped by contractor production control and DCMA representatives.	15%
4	C	Completion of wing half subassemblies	Wing halves moved out of assembly department tooling and prepared for wing join. 95% of department planned standards completed. Completion of this event is dependent upon	Event assembly order signed and stamped by contractor production control and DCMA representatives.	20%

Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value (stated as % of item unit price)
			the completion of event #3.		
5	C	Completion of forward, center, aft, and wing sections	All four major aircraft subassemblies moved out of their respective assembly departments. 95% of the total sum of planned standards completed in the four assembly departments. Completion of this event is dependent upon the completion of event #4.	Event assembly order signed and stamped by contractor production control and DCMA representatives.	20%

Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value (stated as % of item unit price)
6	C	Completion of final assembly	Assembled aircraft moved from final assembly station with 95% of planned standards completed. Completion of this event is dependent upon completion of event #5	Event assembly order signed and stamped by contractor production control and DCMA representatives.	10%

Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value (stated as % of item unit price)
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Note: Aircraft delivery and acceptance is signified by a signed DD 250 by the resident DCMA representative. All the previously made performance-based payments for that aircraft will be liquidated. Upon delivery the final aircraft in each lot, all previously unliquidated performance-based payments will be fully liquidated.

Performance-Based Payments – Production Tooling

Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value (stated as % of item unit price)
1	S	Completion of main landing gear bulkhead tooling.	Completion of all planned standards for the tooling fabrication and assembly.	Event assembly order signed off by contractor production control representative.	30%
2	S	Completion of wing spar tooling.	Completion of all planned standards for the tooling fabrication and assembly.	Event assembly order signed off by contractor production control representative.	30%
3	S	Completion of forward, center, and aft fuselage tooling.	Completion of all planned standards for the tooling fabrication and assembly.	Event assembly order signed off by contractor production control representative.	30%

Note: PBPs will be fully liquidated upon delivery of the production tooling.

Performance-Based Payments – Airframe Life Tests

Event no.	Event type (severable (S) or cumulative (C))	Description	Accomplishment expected	Method of verification	Event value (stated as % of item unit price)
1	S	Airframe Life Testing Plan	Completion and submission of the airframe life test plan and schedule.	Approval of the airframe life test plan by the Program Office	15%
2	C	Completion of structural stress tests.	All planned elements of the airframe structural stress testing have been completed and documented. Completion of this event is conditioned upon completion of event #1.	Approval of structural stress testing report by the Program Office.	25%
3	C	Completion of airframe corrosion tests.	All planned elements of the airframe corrosion testing have been completed and documented. Completion of this event is conditioned upon completion of event #1.	Approval of the corrosion testing report by the Program Office.	25%

4	C	Completion of report on design recommendations to address findings from structural and corrosion tests.	All adverse findings from the structural stress and corrosion testing are covered by recommendations for design improvements to correct the deficiencies found. Completion of this event is conditioned upon the completion of events 1, 2, and 3	Submission of the design change recommendation report by the Program Office.	25%
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Note: The final deliverable for this CLIN is a set of detailed designs for fixes to correct the deficiencies found during the airframe testing program. Final payment of the balance of the price of this CLIN will occur following acceptance of the designs submitted. Upon final payment, all previously made performance-based payments will be fully liquidated.