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of Engineers

**2010 LOCK MAINTENANCE WORKSHOP  
ST. LOUIS, MO  
FEB 9-11, 2010**

**VESSEL ACQUISITIONS**

***Revolving Fund and the Plant Replacement  
and Improvement Program (PRIP)  
ER 37-1-29***

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1



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**PRIP Investments**

- **Criteria**
  - Useful life of 2 or more years
  - Acquisition cost of \$250,000 or more
  - Supports more than one civil works project or appropriation
  - Incidental support may be provided to military programs.
  - All costs must be paid back (mortgage), whether built or not.
  
- **Asset Classification**
  - Minor Items
    - Assets costing less than \$700,000
    - Congressional Notification Not Required
  - Major Items
    - Assets costing \$700,000 or more
    - Congressional Notification Required

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2



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## Typical PRIP Acquisitions

- **Buildings, and other Structures and Facilities**
  - Warehouse, Machine shops, Harbor & Port Facilities, Laboratories, etc.
- **Aircraft**
- **Dredges and Other Floating Plant**
  - Survey boats, Tow boats, Floating Cranes, Barges, etc.
- **Mobile Land Plant**
  - Trucks, Fork Lifts, Bulldozer, Tractor Dozer, Cranes, etc.
- **Fixed Land Plant**
  - Communication Equipment, Global Positioning System, etc.
- **Tools, Office Furniture and Equipment**
  - Survey and Drafting equipment, Systems Furniture, etc.
- **Information Technology Software and Hardware**
  - Local Area Network, Water Control Data System, Computer Aided Design and Drafting etc.
- **Leasehold Improvements to Leased Facilities**

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3

### PRIP Process Template Complex Project

Activity Name	Start	Finish	FY 1	FY 2	FY 3	FY 4	FY 5	FY 6	FY 7	FY 8	FY 9	FY 10
Request Project Seed Money*		Jun - FY 1	◇									
Awaiting Funding	Jun - FY 1	Dec - FY 3	■	■	■							
Concept Development	Dec - FY 3	Jun - FY 4			■	■						
Submit MINS*		Jun - FY 4				◇						
Awaiting MINS Authorization	Jun - FY 4	Dec - FY 6				■	■	■				
Design Development	Jun - FY 4	Dec - FY 6				■	■	■				
Receive MINS**		Dec - FY 6					◇					
Procurement	Dec - FY 6	Nov - FY 7						■	■			
Contract Award		Nov - FY 7							◇			
Contract Performance	Nov - FY 7	Nov - FY 9							■	■	■	
Delivery		Nov - FY 9									◇	
Warranty	Nov - FY 9	Nov - FY 10										■

- \* FY 1 is Current Year
- Presumes project exceeds major item threshold
- \*\* Presumes continued resolution into December

**PRIP Process Template**  
**Well-Defined Vessel**

Activity Name	Start	Finish	FY											
			FY1	FY2	FY3	FY4	FY5	FY6	FY7	FY8	FY9			
Request Project Seed Money *		Jun - FY1	◇											
Awaiting Funding	Jun - FY1	Dec - FY3	█	█	█									
Concept Development	Dec - FY3	Jun - FY3			█									
Submit MINS *		Jun - FY3			◇									
Awaiting MINS Authorization	Jun - FY3	Dec - FY5			█	█								
Design Development	Jun - FY3	Dec - FY5			█	█								
Receive MINS **		Dec - FY5					◇							
Procurement	Dec - FY5	Nov - FY6					█							
Contract Award		Nov - FY6							◇					
Contract Performance	Nov - FY6	Nov - FY8						█	█					
Delivery		Nov - FY8										◇		
Warranty	Nov - FY8	Nov - FY9											█	

- \* FY 1 is Current Year
- Presumes project exceeds major item threshold
- \*\* Presumes continued resolution into December

**PRIP Process Template**  
**Simplified Purchase**

Activity Name	Start	Finish	FY										
			FY1	FY2	FY3	FY4	FY5	FY6	FY7	FY8			
Request Project Seed Money *		Jun - FY1	◇										
Awaiting Funding	Jun - FY1	Dec - FY3	█	█	█								
Concept Development	Dec - FY3	Jun - FY3			█								
Submit MINS *		Jun - FY3			◇								
Awaiting MINS Authorization	Jun - FY3	Dec - FY5			█	█							
Design Development	Jun - FY3	Dec - FY5			█	█							
Receive MINS **		Dec - FY5					◇						
Procurement	Dec - FY5	Jul - FY5					█						
Contract Award		Jul - FY5							◇				
Contract Performance	Jul - FY5	Jul - FY7						█	█				
Delivery		Jul - FY7										◇	
Warranty	Jul - FY7	Jul - FY8											█

- \* FY 1 is Current Year
- Presumes project exceeds major item threshold
- \*\* Presumes continued resolution into December



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## PRIP FUND STATUS as of 30 Sep 09

	FY09
<b>BALANCE as of 1 Oct 08</b>	<b>\$ 269,444,878</b>
Less:	
Funds distributed to MSCs/FOAs in FY08	(136,209,306)
Plus:	-
Recovery of PY Funds	1,182,963
Plus Income from:	
Depreciation	44,139,009
Plant Increment	25,615,795
<b>TOTAL INCOME as of 29 Sep 09:</b>	<b>69,754,804</b>
<b>ESTIMATED FUNDS AVAIL FOR DISTRIBUTION *</b>	<b>\$ 204,173,339</b>

\* Includes the \$40M reserved for Insurance Liability.

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7



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## PRIP Fund Update

### Approximately \$200 M in fund; \$40 M reserved for insurance

- Continuing projects total approximately \$80 M at present
- Income dropped from \$85 M in FY2004 to \$69 M FY2009
- Daily Rental Rates charged for Floating Plant include amounts for Depreciation & Plant Increment
  - Depreciation fixed by CERM tables for useful life
  - Plant Increment determined by type of equipment, age, BoL inflation factors, and legal or operating restrictions
- Floating Plant pays roughly 50% - 60% of Plant Increment income

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8



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## PRIP Fund Update (cont'd)

### **CERM directed by DCG to investigate PRIP fund health & proper size – balancing act between needs & visibility**

- Income consists mostly of Depreciation & Plant Increment
- Auditing PRIP income sources, proper payback

### **PRIP Submissions**

- **Planning** is key – all plant should be on replacement schedule
- PRIP 5-Year plans required by ER 37-1-29
- PRIP submission justifications should show maintenance history, including deferred maintenance (FEM data)

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9



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## PRIP POC's

- **Ed Garcia, HQ, Resource Management:**  
(202) 761-1832
- **Judy Hill, HQ, Civil Works, Programs  
Integration Division:** (202) 761-4230
- **Robert Leitch, HQ, Civil Works, Operations:**  
(202) 761-5853
- **Gerald Delaney/Carol O'Toole, Marine Design Center**  
(215) 656-6850

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10

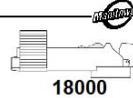


## USACE FLOATING CRANE “MIKE HENDRICKS”

- **USACE FLOATING CRANE “MIKE HENDRICKS”**
- Vessel Owner: United States Army Corps of Engineers
- Vessel Builder: Conrad Industries, Morgan City, LA
- Project Management Team: USACE Marine Design Center and Little Rock District
- Vessel Operation Team: USACE Montgomery Point Lock and Dam
- Vessel Certification: American Bureau of Shipping (ABS) Class #A1, Crane Barge, River Service, with Reinforcement “A.”
- 
- | <u>Vessel Particulars</u>                        | <u>Machinery, and Special Features</u>                   |
|--|--|
| ● Length Overall: 260'-0"                        | Generators (2) Caterpillar - 340 kW, 480V, 3Phase        |
| ● Breadth: 84'-0"                                | Spud HPU: (4) Hydraquip, Houston, TX.- Electro-Hydraulic |
| ● Hull Depth: 12'                                | Spud Winches: (4) Lantec, Langley, BC                    |
| ● Draft (Design): 4'-9"                          | Spuds (4) 4' Square- 52" LG                              |
| ● Displacement: 2872 LTons (Design)              | Sewage Owens Kleen Tank, Model F                         |
| ● Fuel Capacity: 41,500 Gal                      | Switchgear Reo Marine Inc Houston, TX                    |
| ● Potable Water: 6,000 Gal.                      | Crane: Manitowoc, Manitowoc WI                           |
| ● Sewage Holding black/grey: 8000 Gal.           | Crane Boom: 200' Long                                    |
| ● Arrangement: (lower Deck) Locker Room, Office, | Crane Capacity: 340 Short Tons @ 65'                     |
| ● Radius 3 degree list                           |  |
| ● Briefing Room, Showers and Heads               |  |
| ● Machinery Room, Work Shop, Storage             |  |
| ● (Main Deck) Head, Generator Room,              |  |
| ● Stud Control Room                              |  |

### Liftcrane Boom Capacities

Boom No. 55-79A with 100 ft Mast No. 56  
 528,000 lb Crane Counterweight  
 Pedestal Mount - Four Swing Drives  
 0 Degree thru 3 Degree Static Machine List



Oper. Radius Feet	Boom Angle Deg.	Boom Point Elev. Feet	0 Degree List Boom Capacity Pounds	1 Degree List Boom Capacity Pounds	2 Degree List Boom Capacity Pounds	3 Degree List Boom Capacity Pounds	Oper. Radius Feet
200.0 ft							
38	83.5	208.0	754,100				38
38	81.9	208.7	752,000	620,100			38
40	81.3	208.3	705,100	620,100			40
45	79.8	207.4	624,700	571,100	220,900	477,300	45
50	78.4	206.3	558,600	524,300	473,100	424,800	50
55	76.9	205.1	505,300	485,800	430,800	398,600	55
60	75.4	203.7	458,800	456,000	395,400	367,300	60
65	73.9	202.3	420,900	392,000	364,700	340,000	65
70	72.4	200.6	387,400	361,900	337,000	316,000	70
75	70.9	198.8	358,100	335,500	314,300	294,600	75
80	69.4	196.8	332,400	312,300	292,100	275,500	80
85	67.8	194.7	309,600	291,500	274,300	258,400	85
90	66.2	192.5	289,200	272,900	257,400	243,900	90
95	64.6	190.0	271,000	256,100	242,000	230,800	95
100	63.0	187.4	254,900	240,900	228,100	218,000	100
105	61.4	184.6	240,900	227,100	216,100	206,000	105
110	59.7	181.6	228,800	214,500	203,300	193,700	110
115	58.0	178.5	218,500	202,900	192,300	182,400	115
120	56.3	175.1	201,400	191,400	181,900	172,900	120
125	54.5	171.4	190,600	181,300	172,500	164,100	125
130	52.7	167.6	180,300	171,900	163,700	156,000	130
135	50.9	163.4	171,000	165,100	155,600	148,400	135
140	48.9	159.0	162,300	155,000	148,000	141,300	140
145	47.0	154.3	154,200	147,400	140,900	134,600	145
150	44.9	149.3	146,600	140,300	134,300	128,400	150
155	42.8	144.7	139,500	133,700	128,000	122,600	155
160	40.6	137.9	133,000	127,400	122,300	117,100	160
165	38.3	131.5	126,800	121,300	116,600	111,900	165
170	35.8	124.5	120,700	116,000	111,400	107,000	170
175	33.2	116.8	115,100	110,800	106,500	102,400	175
180	30.4	108.3	109,900	105,900	102,000	98,000	180
185	27.3	98.7	104,800	101,100	97,400	93,900	185
190	23.8	87.1	100,000	96,600	93,200	90,000	190
195	19.6	74.0	95,400	92,100	89,100	86,100	195

SN 18001061

8860-A, 2009-01-08  
22

Manitowoc Cranes, Inc.  
Manitowoc, Wisconsin 54220 U.S.A.