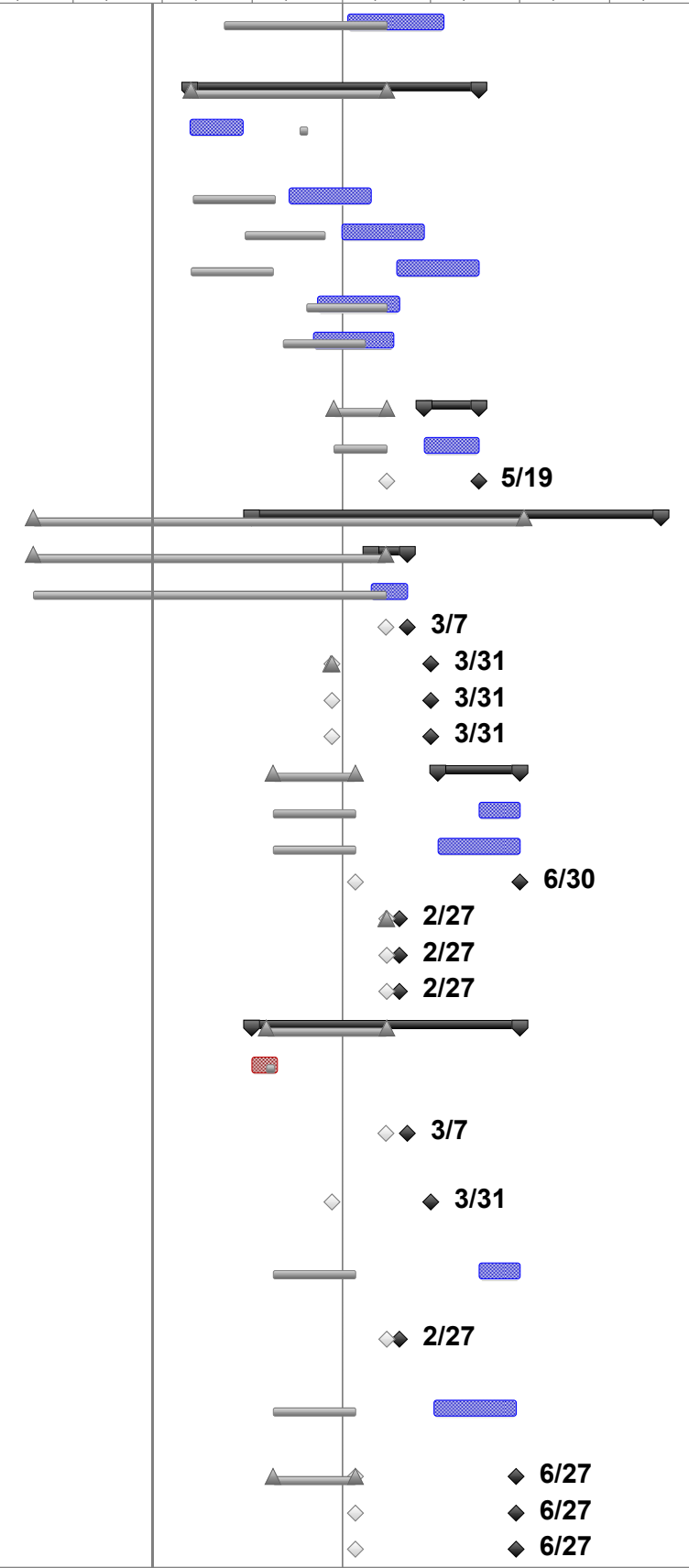


ID	Task Name	Duration	% Compl	Start	Finish	Resource Names	Predecessors	Gantt Chart															
								2012				2013				2014							
								Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4				
1	Halo	970 days	47%	Mon 8/22/11	Fri 5/8/15																		
2	Phase 1	241 days	100%	Mon 8/22/11	Mon 7/23/12																		
7	Phase 1 Review	0 days	100%	Wed 8/22/12	Wed 8/22/12	3,4,6,5F																	
8	Phase 2 Design Input and Design and Development Planning	379 days	100%	Mon 8/22/11	Fri 2/1/13																		
51	Phase 3 Design Output and Design Review	514 days	67%	Fri 1/13/12	Wed 1/1/14																		
52	Marketing	164 days	25%	Mon 5/13/13	Thu 12/26/13																		
53	Operator's Manual	60 days	0%	Fri 10/4/13	Thu 12/26/13	Jones (Marketing)	108FF																
54	Update Business Plan	30 days	75%	Mon 5/13/13	Fri 6/21/13	Jones (Marketing)																	
55	Industrial Design	151 days	86%	Mon 12/3/12	Mon 7/1/13																		
56	Label and Artwork	130 days	80%	Mon 12/3/12	Mon 7/1/13	Hyde (Industrial)	64FF																
57	Finalize Industrial Design	60 days	100%	Thu 12/13/12	Wed 3/6/13	Hyde (Industrial)	30																
58	Halo System	310 days	70%	Mon 8/13/12	Fri 10/18/13																		
59	System Integration Plan	50 days	100%	Mon 8/13/12	Fri 10/19/12	Medart (Project L)																	
60	Family Tree	80 days	100%	Mon 12/10/12	Fri 3/29/13	ME Mgr (Walters)	65FF																
61	System Verification Test Plan	60 days	100%	Mon 8/13/12	Fri 11/2/12	Medart (Project L)	59SS																
62	System Test to Specification Protocol	80 days	0%	Mon 7/1/13	Fri 10/18/13	Medart (Project L)																	
63	ME area	382 days	100%	Fri 1/13/12	Mon 7/1/13																		
64	Schedule ME	382 days	100%	Fri 1/13/12	Mon 7/1/13	ME Mgr (Walters)																	
65	ME Design Review Phase 3	0 days	0%	Mon 7/1/13	Mon 7/1/13		64																
66	EE area	423 days	75%	Wed 3/7/12	Fri 10/18/13																		
67	Schedule EE	423 days	75%	Wed 3/7/12	Fri 10/18/13	EE Mgr (Prais)[1%																	
68	EE Design Review Phase 3	0 days	0%	Fri 10/18/13	Fri 10/18/13		67																
69	SW area	360 days	49%	Fri 8/10/12	Thu 12/26/13																		
70	Schedule SW	360 days	49%	Fri 8/10/12	Thu 12/26/13	SW Mgr (Ebler)[1	12,36																
71	SW Design Review Phase 3	0 days	0%	Thu 12/26/13	Thu 12/26/13		70																
72	UI area	377 days	43%	Tue 7/24/12	Wed 1/1/14																		
73	Schedule UI	377 days	43%	Tue 7/24/12	Wed 1/1/14	Ebler[1%]																	
74	UI Design Review Phase 3	0 days	0%	Wed 1/1/14	Wed 1/1/14		73																
75	PE area	384 days	74%	Thu 4/26/12	Tue 10/15/13																		
76	Schedule PE	384 days	74%	Thu 4/26/12	Tue 10/15/13	PE Mgr (Hamilton)	14,47																
77	PE Design Review Phase 3	0 days	0%	Tue 10/15/13	Tue 10/15/13		76																
78	Biomed area	416 days	88%	Mon 3/5/12	Mon 10/7/13																		
79	schedule Biomed	416 days	88%	Mon 3/5/12	Mon 10/7/13	BE Mgr (Nigroni)[
80	Biomed Design Review Phase 3	0 days	0%	Mon 10/7/13	Mon 10/7/13		79																
81	Model Assembly	125 days	79%	Mon 1/7/13	Fri 6/28/13																		
82	Model assembly w/ EE, ME, PE	10 days	100%	Mon 1/7/13	Fri 3/1/13																		
83	Model assembly	50 days	75%	Mon 4/22/13	Fri 6/28/13																		
84	Usability Engineering Process	20 days	0%	Mon 10/14/13	Fri 11/8/13																		
85	UI / Advisory Panel meetings	20 days	0%	Mon 10/14/13	Fri 11/8/13	Ebler[25%]	15,83FS																
86	Usability Review Phase 3	0 days	0%	Fri 11/8/13	Fri 11/8/13		85																
87	Materials Management	264 days	77%	Mon 9/3/12	Thu 9/5/13																		

ID	Task Name	Duration	% Compl	Start	Finish	Resource Names	Predecessors	Gantt Chart														
								2012				2013				2014						
								Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4			
88	Suppliers and Materials Plan	40 days	100%	Mon 1/7/13	Fri 3/1/13	Ruoff (Purch 1)[2																
89	Long Lead Tooling Procurement	163 days	10%	Tue 1/22/13	Thu 9/5/13	Ruoff (Purch 1)[2	108FF-9															
90	Long Lead Part Procurement	60 days	100%	Mon 9/3/12	Fri 11/23/12	Ruoff (Purch 1)[2																
91	Procure materials for models	200 days	100%	Mon 9/3/12	Fri 6/7/13	Ruoff (Purch 1)[2	90SS															
92	Cost estimates by sub assemblies	215 days	95%	Mon 9/3/12	Fri 6/28/13	Ruoff (Purch 1)[1	90SS															
93	QA	274 days	24%	Mon 12/10/12	Thu 12/26/13																	
94	Vendor qualification (QA MCP or Medikomp)	85 days	80%	Mon 3/4/13	Fri 6/28/13	Koenig (QA MCP)[25%]	88															
95	OEM Software Qualification Plan	60 days	0%	Fri 10/4/13	Thu 12/26/13	Parsons (QA 1)[2	71FF															
96	Update Risk Management Summary (Rev4)	20 days	0%	Mon 6/3/13	Fri 6/28/13	Parsons (QA 1)[10%]																
97	Compliance with 0002-06-2001 (Software Development Process)	10 days	0%	Fri 12/13/13	Thu 12/26/13	Parsons (QA 1)[20%]	71FF															
98	Develop System Software Validation Protocol	190 days	25%	Mon 12/10/12	Fri 8/30/13	Parsons (QA 1)[25%]																
99	Identification of components requiring traceability	115 days	15%	Fri 3/29/13	Thu 9/5/13	Koenig (QA MCP)[25%]	108FF-9 days															
100	Update QA Plan	20 days	0%	Fri 7/26/13	Thu 8/22/13	Parsons (QA 1)[1	108FF-9															
101	First Release of Device Master Record Index	60 days	0%	Fri 5/31/13	Thu 8/22/13	Parsons (QA 1)[5%]	108FF-9 days															
102	Manufacturing	334 days	78%	Mon 5/28/12	Thu 9/5/13																	
103	Design for manufacturability analysis, review, and implementation	334 days	75%	Mon 5/28/12	Thu 9/5/13	Lipp (Manufacturing 1)[50%]	108FF-9 days															
104	Update Manufacturing Plan	50 days	100%	Mon 11/26/12	Fri 2/1/13																	
105	Project Lead	88 days	48%	Tue 4/23/13	Thu 8/22/13																	
106	Update Product Specification	30 days	0%	Fri 7/12/13	Thu 8/22/13	Medart (Project L	108FF-9															
107	Update subassembly specification	30 days	95%	Tue 4/23/13	Thu 8/22/13	Medart (Project L	108FF-9															
108	Phase 3 Review and approval	0 days	0%	Thu 12/26/13	Thu 12/26/13		65,68,86															
109	Phase 4 Design Verification	449 days	8%	Wed 8/29/12	Mon 5/19/14																	
110	ME area	371 days	23%	Wed 8/29/12	Wed 1/29/14																	
111	Schedule ME	371 days	23%	Wed 8/29/12	Wed 1/29/14	ME Mgr (Walters																
112	System level design review Phase 4	0 days	0%	Wed 1/29/14	Wed 1/29/14		111															
113	EE area	321 days	14%	Mon 1/7/13	Mon 3/31/14																	
114	Schedule EE	321 days	14%	Mon 1/7/13	Mon 3/31/14	EE Mgr (Prais)[1																
115	System level design review Phase 4	0 days	0%	Mon 3/31/14	Mon 3/31/14		114															
116	SW area	102 days	0%	Fri 12/27/13	Mon 5/19/14																	
117	Schedule SW	102 days	0%	Fri 12/27/13	Mon 5/19/14	SW Mgr (Ebler)[1	71															
118	SW Design Review Phase 4	0 days	0%	Mon 5/19/14	Mon 5/19/14		117															
119	PE area	97 days	0%	Wed 10/16/13	Thu 2/27/14																	
120	Schedule PE	97 days	0%	Wed 10/16/13	Thu 2/27/14	PE Mgr (Hamilton	77															
121	PE Design Review Phase 4	0 days	0%	Thu 2/27/14	Thu 2/27/14		120															
122	Biomed area	99 days	0%	Tue 10/8/13	Fri 2/21/14																	
123	schedule Biomed	99 days	0%	Tue 10/8/13	Fri 2/21/14	BE Mgr (Nigroni)[80															

ID	Task Name	Duration	% Compl	Start	Finish	Resource Names	Predecessors	Gantt Chart											
								2012				2013				2014			
								Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
124	Biomed Design Review Phase 4	0 days	0%	Fri 2/21/14	Fri 2/21/14		123												
125	Usability Engineering Process	310 days	38%	Mon 12/17/12	Fri 2/21/14														
126	Update Usability Specification	40 days	100%	Mon 12/17/12	Fri 2/8/13	Parsons (QA 1)[1]													
127	Create Prioritized Task List for Usability Tests	35 days	100%	Mon 2/11/13	Mon 4/22/13	Parsons (QA 1)[50%]	126FS+ days												
128	Write usability test protocol	60 days	0%	Mon 10/28/13	Mon 1/20/14	Ebler[25%]	130SF												
129	Assemble usability panel	40 days	0%	Mon 11/25/13	Mon 1/20/14	Marketing MCP[1]	130SF												
130	Usability - Formative study	25 days	0%	Mon 1/20/14	Fri 2/21/14	Ebler[25%]													
131	Usability Review Phase 4	0 days	0%	Fri 2/21/14	Fri 2/21/14		130												
132	QA	246 days	0%	Mon 6/10/13	Mon 5/19/14														
133	Release of QC procedures	80 days	0%	Mon 6/17/13	Fri 10/4/13	Koenig (QA MCP													
134	Update components requiring traceability	40 days	0%	Tue 3/25/14	Mon 5/19/14	Koenig (QA MCP	169FF												
135	Update Device Master Record Index	40 days	0%	Tue 3/25/14	Mon 5/19/14	Parsons (QA 1)[1]	169FF												
136	Update Risk Management Summary	40 days	0%	Mon 6/10/13	Fri 8/2/13	Parsons (QA 1)[1]													
137	Compliance with 0002-06-2001 (Software Development Process)	60 days	0%	Tue 2/25/14	Mon 5/19/14	Parsons (QA 1)[15%]	169FF												
138	Complete System Software Validation Protocol	20 days	0%	Mon 9/2/13	Fri 9/27/13	Parsons (QA 1)[15%]	98												
139	Execute Random UI Test	5 days	0%	Mon 1/6/14	Fri 1/10/14	Parsons (QA 1)[2]													
140	Execute Validation Dry Run	70 days	0%	Mon 1/6/14	Fri 4/11/14	Parsons (QA 1)[2]	138												
141	Manufacturing	185 days	5%	Mon 2/11/13	Fri 10/25/13														
142	Generation of Manufacturing and Test Procedures	160 days	10%	Mon 2/11/13	Fri 9/20/13	Lipp (Manufacturing 41200/1	161FF												
143	Design, Document, Validate, and Implement Assembly Test Fixtures	100 days	0%	Mon 6/10/13	Fri 10/25/13	Lipp (Manufacturing 41200/1	185FF												
144	Final Manufacturing Test Plan	40 days	0%	Mon 9/2/13	Fri 10/25/13	Lipp (Manufacturi	185FF												
145	Project Manager	241 days	4%	Mon 6/17/13	Mon 5/19/14														
146	Update Project Plan	90 days	0%	Tue 1/14/14	Mon 5/19/14	Medart (Project L	169FF												
147	Prototype Design Review	20 days	0%	Tue 2/18/14	Mon 3/17/14	Medart (Project L	111FF-1												
148	Corrdination Functional Groups for System Verification Test Plan	90 days	0%	Fri 8/23/13	Thu 12/26/13	Medart (Project Lead)[10%]	108FF												
149	IP review with Corporate Legal	60 days	25%	Mon 6/17/13	Fri 9/6/13	Medart (Project L													
150	Update Product Specification	80 days	0%	Tue 1/28/14	Mon 5/19/14	Medart (Project L	169FF												
151	Update Subassembly Specification	80 days	0%	Tue 1/28/14	Mon 5/19/14	Medart (Project L	169FF												
152	Technical Publication	80 days	0%	Tue 1/28/14	Mon 5/19/14														
153	Operator Manual	80 days	0%	Tue 1/28/14	Mon 5/19/14	MCP Technical V	169FF												
154	Purchasing	145 days	0%	Mon 4/8/13	Fri 10/25/13														
155	Long Lead Part Procurement	80 days	1%	Mon 4/8/13	Mon 7/29/13	Ruoff (Purch 1)[2]	161SF												
156	Procurement of material for the Pilot and initial production runs	100 days	0%	Mon 6/10/13	Fri 10/25/13	Ruoff (Purch 1)[25%]	185FF												
157	Cost of goods update	5 days	0%	Mon 10/21/13	Fri 10/25/13	Ruoff (Purch 1)[5]	156FF												
158	Service	70 days	0%	Mon 1/6/14	Mon 4/14/14														

ID	Task Name	Duration	% Compl	Start	Finish	Resource Names	Predecessors	2012				2013				2014			
								Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
								159	Preliminary Service Manual and Installation details to Tech Pubs	70 days	0%	Mon 1/6/14	Mon 4/14/14	Hoermann (Service 1)[25%]	211SF				
160	Lead Engineers	211 days	0%	Mon 7/29/13	Mon 5/19/14														
161	Prototype assembly w/ EE, ME, PE, SW, Biomed	40 days	0%	Mon 7/29/13	Fri 9/20/13														
162	ME - Execute System Verification Plan	60 days	0%	Thu 11/7/13	Wed 1/29/14	ME Mgr (Walters)	112FF												
163	EE - Execute System Verification Plan	60 days	0%	Tue 12/31/13	Mon 3/24/14	EE Mgr (Prais)	115FF-5												
164	SW - Execute System Verification Plan	60 days	0%	Tue 2/25/14	Mon 5/19/14	SW Mgr (Ebler)	118FF												
165	PE - Execute System Verification Plan	60 days	0%	Fri 12/6/13	Thu 2/27/14	PE Mgr (Hamilton)	121FF												
166	Biomed - Execute System Verification Plan	60 days	0%	Mon 12/2/13	Fri 2/21/14	BE Mgr (Nigroni)[50%]	124FF												
167	Marketing	40 days	0%	Tue 3/25/14	Mon 5/19/14														
168	Update Business Plan	40 days	0%	Tue 3/25/14	Mon 5/19/14	Jones (Marketing)	169FF												
169	Phase 4 Review	0 days	0%	Mon 5/19/14	Mon 5/19/14		114,118												
170	Phase 5 Design Validation	300 days	0%	Mon 9/30/13	Fri 11/21/14														
171	ME area	27 days	0%	Thu 1/30/14	Fri 3/7/14														
172	Schedule ME	27 days	0%	Thu 1/30/14	Fri 3/7/14	ME Mgr (Walters)	112												
173	System design review	0 days	0%	Fri 3/7/14	Fri 3/7/14		172												
174	EE area	0 days	0%	Mon 3/31/14	Mon 3/31/14														
175	Schedule EE	0 days	0%	Mon 3/31/14	Mon 3/31/14	EE Mgr (Prais)	115												
176	System design review	0 days	0%	Mon 3/31/14	Mon 3/31/14		175												
177	SW area	60 days	0%	Tue 4/8/14	Mon 6/30/14														
178	Schedule SW	30 days	0%	Tue 5/20/14	Mon 6/30/14	SW Mgr (Ebler)	118												
179	Release of software anomalies list	60 days	0%	Tue 4/8/14	Mon 6/30/14	Jones (Marketing)	180FF												
180	SW Design Review Phase 5	0 days	0%	Mon 6/30/14	Mon 6/30/14		178												
181	PE area	0 days	0%	Thu 2/27/14	Thu 2/27/14														
182	Schedule PE	0 days	0%	Thu 2/27/14	Thu 2/27/14	PE Mgr (Hamilton)	121												
183	PE Design Review Phase 5	0 days	0%	Thu 2/27/14	Thu 2/27/14		182												
184	Lead Engineers	196 days	0%	Mon 9/30/13	Mon 6/30/14														
185	Production Equivalent Assembly w/ EE, ME, PE, SW, Biomed	20 days	0%	Mon 9/30/13	Fri 10/25/13														
186	ME - Execute ME System Validation Plan tasks	0 days	0%	Fri 3/7/14	Fri 3/7/14	ME Mgr (Walters)[25%]	172FF												
187	EE - Execute EE System Validation Plan tasks	0 days	0%	Mon 3/31/14	Mon 3/31/14	EE Mgr (Prais)[50%]	175FF												
188	SW - Execute SW System Validation Plan tasks	30 days	0%	Tue 5/20/14	Mon 6/30/14	SW Mgr (Ebler)[25%]	118												
189	PE - Execute PE System Validation Plan tasks	0 days	0%	Thu 2/27/14	Thu 2/27/14	PE Mgr (Hamilton)[25%]	182FF												
190	Biomed - Execute Biomed System Validation Plan tasks	60 days	0%	Fri 4/4/14	Fri 6/27/14	BE Mgr (Nigroni)[25%]	193FF												
191	Biomed area	0 days	0%	Fri 6/27/14	Fri 6/27/14														
192	schedule Biomed	0 days	0%	Fri 6/27/14	Fri 6/27/14	BE Mgr (Nigroni)	124												
193	Biomed Design Review Phase 5	0 days	0%	Fri 6/27/14	Fri 6/27/14		192FF												



ID	Task Name	Duration	% Compl	Start	Finish	Resource Names	Predecessors	2012				2013				2014			
								Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
194	Usability Engineering Process	25 days	0%	Mon 4/21/14	Fri 5/23/14														
195	Usability Engineering Summative Study	25 days	0%	Mon 4/21/14	Fri 5/23/14	Ebler[50%]	131FS+4												
196	Usability Review Phase 5	0 days	0%	Fri 5/23/14	Fri 5/23/14		195												
197	Manufacturing	40 days	0%	Tue 4/1/14	Mon 5/26/14														
198	Pilot Run	40 days	0%	Tue 4/1/14	Mon 5/26/14	Lipp (Manufacturi	175												
199	Pilot Run Review Meeting	0 days	0%	Mon 5/26/14	Mon 5/26/14		198												
200	QA	60 days	0%	Mon 4/14/14	Fri 7/4/14														
201	Final RMS	30 days	0%	Mon 5/26/14	Fri 7/4/14	Parsons (QA 1)[1	227FF												
202	Execute and complete software validation report	60 days	0%	Mon 4/14/14	Fri 7/4/14	Parsons (QA 1)[15%	140												
203	Audit of compliance with 0002-06-2001 and 0002-06-1000	1 day	0%	Mon 6/30/14	Mon 6/30/14	Parsons (QA 1)[1%	180FF												
204	RA	84 days	0%	Tue 3/11/14	Fri 7/4/14														
205	All activities necessary to acquire International Agency Certifications	80 days	0%	Tue 3/11/14	Mon 6/30/14	Sousa (RA1)[50%	173FF,1												
206	Submission of 510 (k)	5 days	0%	Mon 6/30/14	Fri 7/4/14	Sousa (RA1)[20%	227FF												
207	Market Acceptance Testing complete - Summary Usability Test	60 days	0%	Tue 4/8/14	Mon 6/30/14	Sousa (RA1)[25%	173FF,1												
208	Service	64 days	0%	Tue 4/8/14	Mon 7/7/14														
209	Service Plan	60 days	0%	Tue 4/8/14	Mon 6/30/14	Hoermann (Servi	173FF,1												
210	Service personnel training	60 days	0%	Tue 4/8/14	Mon 6/30/14	Hoermann (Servi	173FF,1												
211	Support Service Manual and Installation detail updates to Tech Pubs	60 days	0%	Mon 4/14/14	Mon 7/7/14	Hoermann (Service 1)[25%	229SF												
212	Marketing	80 days	0%	Mon 5/12/14	Mon 9/1/14														
213	Appropriate Training for LMR	60 days	0%	Mon 6/9/14	Mon 9/1/14	Jones (Marketing	232SF												
214	Update Business Plan	40 days	0%	Mon 5/12/14	Fri 7/4/14	Jones (Marketing	227FF												
215	Project Manager	124 days	0%	Tue 1/14/14	Fri 7/4/14														
216	Update Project Plan	120 days	0%	Tue 1/14/14	Mon 6/30/14	Medart (Project L	173FF,1												
217	Update Design History File	80 days	0%	Tue 3/11/14	Mon 6/30/14	Medart (Project L	173FF,1												
218	Update Product Specification	80 days	0%	Mon 3/17/14	Fri 7/4/14	Medart (Project L	227FF												
219	Update Subassembly Specification	80 days	0%	Mon 3/17/14	Fri 7/4/14	Medart (Project L	227FF												
220	Lead Engineer	149 days	0%	Tue 12/10/13	Fri 7/4/14														
221	Initial training for Service personnel and Sustaining Engineering	60 days	0%	Tue 4/8/14	Mon 6/30/14	EE Mgr (Prais)[50%],ME	173FF,1												
222	Production Release of all drawings	80 days	0%	Tue 12/10/13	Mon 3/31/14	EE Mgr (Prais)[10	173FF,1												
223	Pre-release reliability evaluation summary report	40 days	0%	Mon 5/12/14	Fri 7/4/14	EE Mgr (Prais)[5%],ME	227FF												
224	Technical Publication	80 days	0%	Mon 3/17/14	Fri 7/4/14														
225	English Ops Manual	80 days	0%	Mon 3/17/14	Fri 7/4/14	MCP Technical V	227FF												
226	Release of translated manuals (German)	80 days	0%	Mon 3/17/14	Fri 7/4/14	MCP Technical V	227FF												
227	Phase 5 Submission of 510(k) and CE Technical File	0 days	0%	Fri 7/4/14	Fri 7/4/14		173FF,1												
228	Service Manual	30 days	0%	Mon 7/7/14	Fri 8/15/14		227												

ID	Task Name	Duration	% Compl	Start	Finish	Resource Names	Predece	Gantt Chart											
								2012				2013				2014			
								Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
270	ME-area-Halo-rev34	567.5 days?	78%	Mon 1/2/12	Fri 3/7/14														
271	BME-area-Halo-rev18	547 days	66%	Thu 2/2/12	Fri 3/28/14														
272	Halo_Swui-rev14	681.67 days?	43%	Thu 4/26/12	Thu 1/1/15														