

Gunnery Logs Nov 25 1914 Suffolk Raid

Channel Fleet, Prince of Wales

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:03	14,066	-827	2 HE		Seydlitz
09:04	13,156	-896	1 HE		Seydlitz
09:05	12,271	-875	1 HE		Seydlitz
09:06	11,416	-842	1 HE		Seydlitz
09:07	11,101	-311	1 HE		Seydlitz
09:08	10,875	-215	2 HE		Seydlitz
09:09	10,646	-225	3 HE		Seydlitz
09:10	10,408	-233	3 HE	1 hit	Seydlitz
09:11	10,144	84	2 AP		Seydlitz
09:12	10,282	203	6 AP		Seydlitz
09:13	10,497	292	6 AP		Seydlitz
09:14	10,816	369	6 AP		Seydlitz
09:15	11,227	448	6 AP		Seydlitz
09:16	11,700	505	6 AP		Seydlitz
09:19	12,009	202	5 AP		Seydlitz
09:20	12,324	303	3 AP		Seydlitz
09:21	12,711	397	4 AP		Seydlitz
09:22	13,137	457	2 AP		Seydlitz
09:23	13,573	466	2 AP		Seydlitz
09:24	14,076	531	1 AP		Seydlitz
09:25	14,656	611	2 AP		Seydlitz
09:27	14,882	-273	1 AP		Seydlitz
09:28	14,607	-247	2 AP		Seydlitz
09:29	14,372	-201	1 AP		Seydlitz
09:30	14,319	-157	2 AP		Seydlitz
09:31	14,195	-91	1 AP		Seydlitz
09:32	14,134	-25	2 AP		Seydlitz
09:33	14,136	42	1 AP		Seydlitz
09:34	14,166	96	2 AP		Seydlitz
09:35	14,281	164	1 AP		Seydlitz
09:36	14,458	223	1 AP		Seydlitz
09:37	14,713	291	2 AP		Seydlitz
09:38	15,031	341	1 AP		Seydlitz
09:43	14,706	-601	1 AP		Seydlitz
09:44	14,110	-539	2 AP		Seydlitz
09:45	13,533	-501	2 AP		Seydlitz
09:46	13,039	-457	2 AP		Seydlitz
09:47	12,609	-392	2 AP		Seydlitz
09:48	12,251	-325	2 AP		Seydlitz
09:49	11,971	-238	2 AP		Seydlitz
09:50	11,775	-150	2 AP		Seydlitz
09:51	11,666	-61	1 AP		Seydlitz
09:52	11,700	81	2 AP		Seydlitz
09:53	11,824	171	2 AP		Seydlitz
09:54	12,035	259	1 AP		Seydlitz
09:55	12,330	328	1 AP		Seydlitz
12in/40 Primary	Total		104 shells	1 hit	1%

Channel Fleet, Prince of Wales, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:05	12,271	-875	5 HE		Seydlitz
09:06	11,416	-842	6 HE		Seydlitz
09:07	11,101	-311	1 HE		Seydlitz
09:08	10,875	-215	5 HE		Seydlitz
09:09	10,646	-225	5 HE		Seydlitz
09:10	10,408	-233	4 HE		Seydlitz
09:11	10,144	84	3 HE		Seydlitz
09:12	10,282	203	9 HE		Seydlitz
09:13	10,497	292	8 HE		Seydlitz
09:14	10,816	369	8 HE	1 hit	Seydlitz
09:15	11,227	448	8 HE		Seydlitz
09:16	11,700	505	8 HE		Seydlitz
09:18	11,410	168	3 HE		Seydlitz
09:19	12,009	202	7 HE		Seydlitz
09:20	12,324	303	4 HE		Seydlitz
09:21	12,711	397	4 HE		Seydlitz
09:47	12,609	-392	6 HE		Seydlitz
09:48	12,251	-325	6 HE		Seydlitz
09:49	11,971	-238	6 HE		Seydlitz
09:50	11,775	-150	4 HE		Seydlitz
09:51	11,666	-61	4 HE		Seydlitz
09:52	11,700	81	5 HE		Seydlitz
09:53	11,824	171	3 HE		Seydlitz
09:54	12,035	259	3 HE		Seydlitz
09:55	12,330	328	2 HE		Seydlitz
09:56	12,687	397	1 HE		Seydlitz
6in/45 Secondary Total			128 shells	1 hit	0.8%

Channel Fleet, Bulwark

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:04	14,127	-963	2 HE		Seydlitz
09:05	13,176	-944	1 HE		Seydlitz
09:06	12,250	-913	1 HE		Seydlitz
09:07	12,076	-198	1 HE		Seydlitz
09:08	11,876	-209	1 HE		Seydlitz
09:09	11,562	-309	1 HE		Seydlitz
09:12	11,641	145	1 HE		Seydlitz
09:13	11,815	205	1 HE		Seydlitz
09:14	12,060	272	1 HE		Seydlitz
09:15	12,327	304	5 HE		Seydlitz
09:16	12,618	326	4 HE		Seydlitz
09:17	12,519	-361	1 HE		Seydlitz
09:18	12,367	-108	1 HE		Seydlitz
09:19	11,868	215	1 HE		Seydlitz
09:20	12,142	293	3 HE		Seydlitz
09:21	12,493	378	4 HE		Seydlitz
09:22	12,922	454	4 HE		Seydlitz
09:23	13,391	432	4 AP		Seydlitz
09:24	13,862	512	4 AP		Seydlitz
09:25	14,413	579	2 AP		Seydlitz
09:26	15,024	643	3 AP		Seydlitz
09:28	14,933	-263	3 AP		Seydlitz
09:29	14,672	-235	3 AP		Seydlitz
09:30	14,494	-148	2 AP		Seydlitz
09:31	14,474	-124	3 AP		Seydlitz
09:32	14,201	-58	4 AP		Seydlitz
09:33	14,170	8	3 AP		Seydlitz
09:34	14,163	62	3 AP	1 hit	Seydlitz
09:35	14,243	130	4 AP		Seydlitz
09:36	14,385	189	3 AP	1 hit	Seydlitz
09:37	14,606	257	4 AP	rapid	Seydlitz
09:38	14,893	325	2 AP		Seydlitz
09:44	14,553	-624	3 AP		Moltke
09:45	13,867	-560	4 AP		Moltke
09:46	13,313	-520	4 AP		Moltke
09:47	12,817	-457	4 AP		Moltke
09:48	12,388	-392	4 AP		Moltke
09:49	12,031	-325	4 AP		Moltke
09:50	11,754	-238	4 AP		Moltke
09:51	11,562	-150	3 AP	1 hit	Moltke
09:52	11,468	-9	3 AP	1 hit	Moltke
09:53	11,510	81	4 AP	1 hit	Moltke
09:54	11,643	171	4 AP		Moltke
09:55	11,865	259	4 AP		Moltke
09:56	12,158	332	4 AP		Moltke
09:57	12,518	212	3 AP		Moltke
09:58	12,767	277	4 AP		Moltke
09:59	13,083	341	4 AP		Moltke
10:00	13,460	403	3 AP	1 hit	Moltke
10:01	13,894	463	2 AP		Moltke
10:02	14,411	576	1 AP		Moltke
10:03	15,041	659	2 AP		Moltke
10:26	14,896	-235	1 AP		Moltke
10:27	14,584	-253	1 AP		Moltke
10:28	14,333	-247	1 AP		Moltke
10:29	14,090	-235	2 AP		Moltke
10:30	13,857	-229	1 AP		Moltke
10:31	13,633	-216	1 AP		Moltke
10:32	13,342	-287	2 AP		Moltke
10:33	13,088	-287	2 AP		Moltke
10:34	12,800	-287	1 AP		Moltke
10:36	12,226	-286	2 AP		Moltke
10:37	11,939	-286	1 AP		Moltke
10:38	11,653	-286	3 AP		Moltke
10:39	11,507	-131	2 AP		Moltke
10:40	11,432	-89	2 AP		Moltke
10:41	11,113	-281	1 AP		Moltke
10:42	11,100	-276	3 AP		Moltke
10:43	10,888	-242	2 AP		Moltke

10:44	10,711	-210	2 SAP		Moltke
10:45	10,567	-175	3 SAP		Moltke
10:46	10,457	-140	1 SAP		Moltke
10:47	10,507	53	3 SAP	1 hit	Moltke
10:48	10,610	87	2 SAP		Moltke
10:49	10,680	77	2 SAP		Moltke
10:50	11,394	723	2 SAP		Moltke
10:51	12,073	697	2 SAP		Moltke
10:52	13,019	986	1 SAP		Moltke
10:53	13,972	986	1 SAP		Moltke
12in/40	Primary Total		195 shells	7 hits	3.6%

Channel Fleet, Bulwark, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:06	12,250	-913	6 HE		Seydlitz
09:07	12,076	-198	5 HE		Seydlitz
09:08	11,876	-209	3 HE		Seydlitz
09:09	11,562	-309	3 HE		Seydlitz
09:10	11,391	53	1 HE		Seydlitz
09:12	11,641	145	4 HE		Seydlitz
09:13	11,815	205	6 HE		Seydlitz
09:14	12,060	272	4 HE		Seydlitz
09:15	12,327	304	6 HE		Seydlitz
09:16	12,618	326	6 HE		Seydlitz
09:17	12,519	-361	4 HE		Seydlitz
09:18	12,367	-108	3 HE		Seydlitz
09:19	11,868	215	6 HE		Seydlitz
09:20	12,142	293	4 HE		Seydlitz
09:21	12,493	378	4 HE		Seydlitz
09:47	12,817	-457	6 HE		Moltke
09:48	12,388	-392	6 HE		Moltke
09:49	12,031	-325	6 HE		Moltke
09:50	11,754	-238	6 HE		Moltke
09:51	11,562	-150	5 HE		Moltke
09:52	11,468	-9	7 HE		Moltke
09:53	11,510	81	5 HE		Moltke
09:54	11,643	171	6 HE		Moltke
09:55	11,865	259	6 HE		Moltke
09:56	12,158	332	4 HE		Moltke
09:57	12,518	212	3 HE		Moltke
09:58	12,767	277	4 HE		Moltke
10:34	12,800	-287	3 HE		Moltke
10:36	12,226	-286	3 HE		Moltke
10:37	11,939	-286	2 HE		Moltke
10:38	11,653	-286	5 HE		Moltke
10:39	11,507	-131	2 HE		Moltke
10:40	11,432	-89	2 HE	1 hit	Moltke
10:41	11,113	-281	1 HE		Moltke
10:42	11,100	-276	3 HE		Moltke
10:43	10,888	-242	2 HE		Moltke
10:44	10,711	-210	2 HE		Moltke
10:45	10,567	-175	2 HE		Moltke
10:46	10,457	-140	2 HE		Moltke
10:47	10,507	53	2 HE		Moltke
10:48	10,610	87	2 HE		Moltke
10:49	10,680	77	2 HE		Moltke
10:50	11,394	723	2 HE		Moltke
10:51	12,073	697	3 HE		Moltke
6in/45	Secondary Total		169 shells	1 hit	0.6%

Channel Fleet, London

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:04	14,616	-964	1 HE		Moltke
09:05	13,168	-946	2 HE		Seydlitz
09:06	12,239	-915	1 HE		Seydlitz
09:07	12,053	-163	2 HE		Seydlitz
09:08	11,891	-136	1 HE		Seydlitz
09:10	11,328	-159	1 HE		Seydlitz
09:11	11,158	-163	3 HE		Seydlitz
09:12	11,066	-65	2 HE		Seydlitz
09:13	10,687	203	6 HE		Seydlitz
09:14	10,910	297	5 HE		Seydlitz
09:15	11,237	371	6 HE		Seydlitz
09:16	11,639	432	5 AP	1 hit	Seydlitz
09:17	11,641	-127	5 AP		Seydlitz
09:18	11,216	103	6 AP	1 hit	Seydlitz
09:19	11,748	171	5 AP		Seydlitz
09:20	11,978	259	5 AP		Seydlitz
09:21	12,290	345	6 AP		Seydlitz
09:22	12,684	420	5 AP		Seydlitz
09:23	13,146	503	5 AP		Seydlitz
09:24	13,664	478	4 AP		Seydlitz
09:25	14,184	546	3 AP		Seydlitz
09:26	14,767	611	3 AP		Seydlitz
09:27	14,776	43	3 AP		Seydlitz
09:29	14,983	-252	2 AP		Seydlitz
09:30	14,779	-182	3 AP		Seydlitz
09:31	14,635	-115	2 AP		Seydlitz
09:32	14,286	-91	4 AP		Seydlitz
09:33	14,222	-25	3 AP		Seydlitz
09:34	14,179	28	3 AP	1 hit	Seydlitz
09:35	14,223	96	4 AP		Seydlitz
09:36	14,329	154	2 AP		Seydlitz
09:37	14,516	223	3 AP		Seydlitz
09:38	14,770	291	3 AP		Seydlitz
09:39	15,088	341	2 AP		Seydlitz
09:45	14,257	-571	3 AP		Von der Tann
09:46	13,648	-539	4 AP		Von der Tann
09:47	13,092	-501	5 AP		Von der Tann
09:48	12,596	-457	4 AP		Von der Tann
09:49	12,166	-392	4 AP		Von der Tann
09:50	11,811	-307	4 AP		Von der Tann
09:51	11,537	-238	4 AP		Von der Tann
09:52	11,349	-150	4 AP		Von der Tann
09:53	11,271	9	3 AP		Von der Tann
09:54	11,321	99	4 AP		Von der Tann
09:55	11,464	188	3 AP		Von der Tann
09:56	11,686	265	4 AP		Von der Tann
09:57	11,987	422	4 AP		Von der Tann
09:58	12,376	334	2 AP		Von der Tann
09:59	12,716	277	3 AP		Von der Tann
10:00	13,033	356	4 AP		Von der Tann
10:01	13,412	403	4 AP	1 hit	Von der Tann
10:02	13,872	487	2 AP		Von der Tann
10:03	14,426	616	2 AP		Von der Tann
10:04	15,060	659	1 AP		Von der Tann
10:12	14,906	138	1 AP		Von der Tann
10:13	14,965	102	1 AP		Von der Tann
10:14	15,087	139	2 AP		Von der Tann
10:27	14,499	-265	2 AP		Von der Tann
10:28	14,235	-259	1 AP		Von der Tann
10:29	13,979	-253	2 AP		Von der Tann
10:30	13,732	-241	2 AP		Von der Tann
10:31	13,494	-235	1 AP		Von der Tann
10:32	13,212	-280	2 SAP		Von der Tann
10:33	12,965	-284	2 SAP		Von der Tann
10:34	12,674	-289	2 SAP		Von der Tann
10:36	12,096	-289	2 SAP		Von der Tann
10:37	11,807	-289	1 SAP		Von der Tann
10:38	11,518	-289	3 SAP		Von der Tann
10:39	11,444	-60	3 SAP		Von der Tann

10:40	11,439	-10	2 SAP	1 hit	Von der Tann
10:41	10,926	-284	1 SAP rapid		Von der Tann
10:42	11,116	-245	1 SAP		Von der Tann
10:43	10,903	-244	3 SAP		Von der Tann
10:44	10,724	-212	3 SAP		Von der Tann
10:45	10,578	-177	3 SAP		Von der Tann
10:46	10,467	-143	2 SAP		Von der Tann
10:47	10,521	59	2 SAP		Von der Tann
10:48	10,628	92	2 SAP		Von der Tann
10:49	10,702	77	3 SAP		Von der Tann
10:50	11,465	768	1 SAP		Von der Tann
10:51	12,183	737	3 SAP	1 hit	Von der Tann
10:52	12,945	766	1 SAP		Von der Tann
10:53	14,002	1,018	1 SAP		Von der Tann
10:54	15,020	1,018	1 SAP		Von der Tann
12in/40 Primary	Total		240 shells	6 hits	2.5%

Channel Fleet, London, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:06	12,239	-915	5 HE		Seydlitz
09:07	12,053	-163	5 HE		Seydlitz
09:08	11,891	-136	4 HE		Seydlitz
09:09	11,554	-305	2 HE		Seydlitz
09:10	11,328	-159	4 HE		Seydlitz
09:11	11,158	-163	5 HE		Seydlitz
09:12	11,066	-65	4 HE		Seydlitz
09:13	10,687	203	8 HE		Seydlitz
09:14	10,910	297	7 HE		Seydlitz
09:15	11,237	371	9 HE		Seydlitz
09:16	11,639	432	5 HE		Seydlitz
09:17	11,641	-127	8 HE		Seydlitz
09:18	11,216	103	8 HE		Seydlitz
09:19	11,748	171	6 HE		Seydlitz
09:20	11,978	259	7 HE		Seydlitz
09:21	12,290	345	5 HE	1 hit	Seydlitz
09:22	12,684	420	4 HE	1 hit	Seydlitz
09:48	12,596	-457	6 HE		Von der Tann
09:49	12,166	-392	5 HE		Von der Tann
09:50	11,811	-307	6 HE		Von der Tann
09:51	11,537	-238	6 HE		Von der Tann
09:52	11,349	-150	7 HE		Von der Tann
09:53	11,271	9	6 HE	1 hit	Von der Tann
09:54	11,321	99	7 HE		Von der Tann
09:55	11,464	188	6 HE		Von der Tann
09:56	11,686	265	6 HE		Von der Tann
09:57	11,987	422	4 HE		Von der Tann
09:58	12,376	334	4 HE		Von der Tann
09:59	12,716	277	3 HE		Von der Tann
10:34	12,674	-289	3 HE		Von der Tann
10:36	12,096	-289	3 HE		Von der Tann
10:37	11,807	-289	4 HE		Von der Tann
10:38	11,518	-289	5 HE		Von der Tann
10:39	11,444	-60	4 HE		Von der Tann
10:40	11,439	-10	3 HE		Von der Tann
10:41	10,926	-284	3 HE		Von der Tann
10:42	11,116	-245	3 HE		Von der Tann
10:43	10,903	-244	2 HE		Von der Tann
10:44	10,724	-212	3 HE		Von der Tann
10:45	10,578	-177	3 HE		Von der Tann
10:46	10,467	-143	1 HE		Von der Tann
10:47	10,521	59	3 HE		Von der Tann
10:48	10,628	92	2 HE	1 hit	Von der Tann
10:49	10,702	77	3 HE		Von der Tann
10:50	11,465	768	2 HE		Von der Tann
10:51	12,183	737	4 HE		Von der Tann
6in/45 Secondary Total			213 shells	4 hits	1.9%

Channel Fleet, Venerable

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:05	13,766	-967	1 HE		Moltke
09:06	12,809	-949	1 HE		Moltke
09:07	12,002	-171	2 HE		Moltke
09:08	11,856	-69	4 HE		Moltke
09:09	11,832	36	5 HE		Moltke
09:10	11,919	147	5 AP		Moltke
09:11	12,124	-270	1 AP		Moltke
09:12	11,688	-80	2 AP		Moltke
09:13	11,616	-47	2 AP		Moltke
09:14	11,590	-7	3 AP		Moltke
09:15	11,525	337	3 AP		Moltke
09:16	11,155	386	6 AP	1 hit	Moltke
09:17	11,629	-164	5 AP		Moltke
09:18	11,160	13	6 AP		Moltke
09:19	11,619	81	4 AP		Moltke
09:20	11,760	171	5 AP		Moltke
09:21	11,989	259	4 AP		Moltke
09:22	12,306	350	4 AP		Moltke
09:23	12,698	437	4 AP		Moltke
09:24	13,182	521	4 AP		Moltke
09:25	13,713	495	3 AP		Moltke
09:26	14,239	563	4 AP		Moltke
09:27	14,653	93	2 AP		Moltke
09:28	14,836	221	3 AP		Moltke
09:30	15,053	-231	2 AP		Moltke
09:31	14,850	-165	3 AP		Moltke
09:32	14,477	-359	1 AP		Moltke
09:33	14,166	-91	3 AP		Moltke
09:34	14,051	-25	3 AP		Moltke
09:35	14,026	28	3 AP		Moltke
09:36	14,086	96	4 AP		Moltke
09:37	13,989	171	3 AP		Moltke
09:38	14,196	240	3 AP		Moltke
09:39	14,472	308	3 AP		Moltke
09:45	14,944	-632	1 AP		Blucher
09:46	14,041	-616	2 AP		Blucher
09:47	13,430	-581	2 AP		Blucher
09:48	12,872	-536	2 AP		Blucher
09:49	12,374	-457	2 AP		Blucher
09:50	11,945	-392	2 AP		Blucher
09:51	11,591	-307	1 AP		Blucher
09:52	11,320	-221	2 AP		Blucher
09:53	11,137	-132	3 AP		Blucher
09:54	11,074	9	2 AP		Blucher
09:55	11,133	99	2 AP		Blucher
09:56	11,277	180	2 AP		Blucher
09:57	11,507	376	2 AP		Blucher
10:00	12,664	293	2 HE		Blucher
10:01	12,983	356	1 AP		Blucher
10:02	13,387	441	2 AP		Blucher
10:11	14,897	-437	1 HE		Blucher
12in/40 Primary Total			142 shells	1 hit	0.7%

Channel Fleet, Venerable, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:06	12,809	-949	5 HE		Moltke
09:07	12,002	-171	4 HE		Moltke
09:08	11,856	-69	7 HE		Moltke
09:09	11,832	36	6 HE		Moltke
09:10	11,919	147	6 HE		Moltke
09:11	12,124	-270	1 HE		Moltke
09:12	11,688	-80	2 HE		Moltke
09:13	11,616	-47	4 HE		Moltke
09:14	11,590	-7	4 HE		Moltke
09:15	11,525	337	6 HE		Moltke
09:16	11,155	386	8 HE		Moltke
09:17	11,629	-164	6 HE		Moltke
09:18	11,160	13	7 HE	1 hit	Moltke
09:19	11,619	81	6 HE		Moltke
09:20	11,760	171	6 HE		Moltke
09:21	11,989	259	7 HE		Moltke
09:22	12,306	350	3 HE		Moltke
09:23	12,698	437	4 HE		Moltke
09:48	12,872	-536	3 HE		Blucher
09:49	12,374	-457	6 HE		Blucher
09:50	11,945	-392	6 HE		Blucher
09:51	11,591	-307	5 HE		Blucher
09:52	11,320	-221	6 HE		Blucher
09:53	11,137	-132	6 HE		Blucher
09:54	11,074	9	7 HE		Blucher
09:55	11,133	99	5 HE		Blucher
09:56	11,277	180	4 HE		Blucher
09:57	11,507	376	4 HE		Blucher
09:58	11,922	483	4 HE		Blucher
09:59	12,321	342	3 HE		Blucher
10:00	12,664	293	3 HE		Blucher
10:33	12,847	-280	3 HE		Blucher
10:34	12,567	-280	3 HE		Blucher
10:35	12,283	-290	1 HE		Blucher
10:36	11,993	-290	5 HE		Blucher
10:37	11,703	-290	5 HE		Blucher
10:38	11,413	-290	6 HE		Blucher
10:39	11,210	-189	5 HE		Blucher
10:40	11,055	-172	5 HE		Blucher
10:41	10,768	-287	3 HE		Blucher
10:42	10,607	-126	6 HE		Blucher
10:43	10,919	-212	2 HE		Blucher
10:44	10,738	-145	2 HE		Blucher
10:45	10,591	-146	2 HE		Blucher
10:46	10,478	-145	2 HE		Blucher
10:47	10,536	65	2 HE		Blucher
10:48	10,647	92	3 HE		Blucher
10:49	10,725	83	2 HE		Blucher
10:50	11,401	683	4 HE		Blucher
10:51	12,062	681	5 HE		Blucher
10:52	12,761	702	3 HE		Blucher
6in/45 Secondary Total			223 shells	1 hit	0.4%

Channel Fleet, Queen

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:01	14,290	-1,009	2 HE		Seydlitz
09:03	12,424	-902	2 HE		Seydlitz
09:04	11,457	-959	1 HE		Seydlitz
09:05	10,510	-934	1 HE		Seydlitz
09:06	9,587	-906	1 HE		Seydlitz
09:07	9,390	-140	1 HE		Seydlitz
09:08	9,265	-63	4 HE		Seydlitz
09:09	9,260	52	2 HE		Seydlitz
09:10	9,377	172	2 HE		Seydlitz
09:11	9,622	296	2 AP		Seydlitz
09:12	9,971	400	2 AP		Seydlitz
09:13	10,416	481	2 AP		Seydlitz
09:14	10,933	552	2 AP		Seydlitz
09:15	11,505	601	1 AP		Seydlitz
09:16	12,127	639	1 AP		Seydlitz
12in/40	Primary	Total	26 shells	0 hits	

Channel Fleet, Queen, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:03	12,424	-902	5 HE		Seydlitz
09:04	11,457	-959	5 HE		Seydlitz
09:05	10,510	-934	6 HE		Seydlitz
09:06	9,587	-906	6 HE		Seydlitz
09:07	9,390	-140	7 HE		Seydlitz
09:08	9,265	-63	6 HE		Seydlitz
09:09	9,260	52	10 HE		Seydlitz
09:10	9,377	172	9 HE		Seydlitz
09:11	9,622	296	9 HE		Seydlitz
09:12	9,971	400	8 HE		Seydlitz
09:13	10,416	481	5 HE		Seydlitz
09:14	10,933	552	6 HE		Seydlitz
09:15	11,505	601	5 HE		Seydlitz
09:16	12,127	639	1 HE		Seydlitz
6in/45	Secondary	Total	88 shells	0 hits	

Channel Fleet, Formidable

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:02	14,213	-951	2 HE		Moltke
09:03	13,277	-925	2 HE		Moltke
09:04	12,301	-975	1 HE		Moltke
09:05	11,336	-959	2 HE		Moltke
09:06	10,390	-934	1 HE		Moltke
09:07	9,579	-230	5 HE		Moltke
09:08	9,366	-162	5 HE		Moltke
09:09	9,262	-52	4 AP		Moltke
09:10	9,277	66	4 AP		Moltke
09:11	9,422	207	4 AP		Moltke
09:12	9,514	331	3 AP		Moltke
09:13	9,900	434	4 AP		Moltke
09:14	10,371	512	4 AP		Moltke
09:15	10,906	566	4 AP		Moltke
09:16	11,496	614	4 AP		Moltke
09:17	12,126	241	4 AP		Moltke
09:18	12,382	302	4 AP		Moltke
09:19	12,728	378	3 AP		Moltke
09:20	13,146	445	5 AP		Moltke
09:21	13,630	508	3 AP		Moltke
09:23	13,612	43	2 AP		Moltke
09:24	13,643	55	2 AP		Moltke
09:25	13,689	69	3 AP		Moltke
09:26	13,777	108	4 AP		Moltke
09:27	13,815	-285	4 AP		Moltke
09:28	13,558	-222	4 AP		Moltke
09:29	13,366	-157	3 AP		Moltke
09:30	13,239	-91	4 AP		Moltke
09:31	13,179	-25	4 AP		Moltke
09:32	13,174	28	3 AP		Moltke
09:33	13,242	96	4 AP		Moltke
09:34	13,372	171	4 AP		Moltke
09:35	13,575	240	5 AP		Moltke
09:36	13,850	308	3 AP		Moltke
09:37	13,723	52	2 AP		Moltke
09:38	13,845	115	2 AP		Moltke
09:39	13,978	152	3 AP		Moltke
09:40	14,147	189	4 AP		Moltke
09:41	14,350	225	4 AP	1 hit	Moltke
09:42	14,573	-552	3 AP		Moltke
09:43	14,122	-440	4 AP		Moltke
09:44	13,631	-468	4 AP		Moltke
09:45	13,173	-424	4 AP		Moltke
09:46	12,761	-375	5 AP		Moltke
09:47	12,421	-307	6 AP		Moltke
09:48	12,159	-221	5 AP		Moltke
09:49	11,979	-132	5 AP		Moltke
09:50	11,886	-43	6 AP		Moltke
09:51	11,882	47	6 AP	1 hit	Moltke
09:52	11,975	188	6 AP	1 hit	Moltke
09:53	12,198	259	6 AP		Moltke
09:54	12,502	345	6 AP		Moltke
09:55	12,882	412	5 AP		Moltke
09:56	13,332	477	5 AP		Moltke
09:57	13,854	377	4 AP		Moltke
09:58	14,266	443	4 AP		Moltke
09:59	14,763	531	2 AP		Moltke
12in/40 Primary Total			218 shells	3 hits	1.4%

Channel Fleet, Formidable, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:04	12,301	-975	5 HE		Moltke
09:05	11,336	-959	5 HE		Moltke
09:06	10,390	-934	6 HE		Moltke
09:07	9,579	-230	7 HE		Moltke
09:08	9,366	-162	6 HE		Moltke
09:09	9,262	-52	5 HE		Moltke
09:10	9,277	66	7 HE		Moltke
09:11	9,422	207	7 HE		Moltke
09:12	9,514	331	8 HE		Moltke
09:13	9,900	434	7 HE	1 hit	Moltke
09:14	10,371	512	7 HE		Moltke
09:15	10,906	566	7 HE		Moltke
09:16	11,496	614	5 HE		Moltke
09:17	12,126	241	4 HE		Moltke
09:18	12,382	302	4 HE		Moltke
09:19	12,728	378	4 HE		Moltke
09:46	12,761	-375	6 HE		Moltke
09:47	12,421	-307	6 HE		Moltke
09:48	12,159	-221	6 HE		Moltke
09:49	11,979	-132	7 HE		Moltke
09:50	11,886	-43	6 HE	1 hit	Moltke
09:51	11,882	47	6 HE		Moltke
09:52	11,975	188	7 HE		Moltke
09:53	12,198	259	6 HE		Moltke
09:54	12,502	345	5 HE		Moltke
09:55	12,882	412	5 HE		Moltke
6in/45 Secondary Total			154 shells	2 hits	1.3%

Channel Fleet, Irresistible

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:03	13,645	-936	2 HE		Moltke
09:04	12,658	-982	1 HE		Moltke
09:05	11,680	-967	1 HE		Moltke
09:06	10,718	-951	2 HE		Moltke
09:07	10,270	-934	1 HE		Von der Tann
09:08	9,555	-248	4 HE		Von der Tann
09:09	9,356	-162	5 HE		Von der Tann
09:10	9,270	-35	5 AP		Von der Tann
09:11	9,310	84	4 AP		Von der Tann
09:12	9,100	261	4 AP		Von der Tann
09:13	9,419	366	4 AP		Von der Tann
09:14	9,837	465	4 AP		Von der Tann
09:15	10,330	523	5 AP		Von der Tann
09:16	10,884	588	4 AP		Von der Tann
09:17	11,493	711	4 AP		Von der Tann
09:18	12,180	600	4 AP		Von der Tann
09:19	12,384	557	1 AP		Von der Tann
09:20	12,897	553	1 AP		Von der Tann
09:21	13,427	-67	2 AP		Von der Tann
09:22	13,161	-256	1 AP		Von der Tann
09:24	13,605	-84	1 AP		Von der Tann
09:25	13,543	32	1 AP		Von der Tann
09:27	13,611	30	1 AP		Von der Tann
09:28	13,639	31	2 AP		Von der Tann
09:29	13,688	69	2 AP		Von der Tann
09:30	13,415	-243	1 AP		Von der Tann
09:33	13,113	117	5 AP		Von der Tann
09:34	13,249	169	4 AP		Von der Tann
09:35	13,441	235	5 AP		Von der Tann
09:36	13,724	335	4 AP		Von der Tann
09:37	13,756	280	4 AP		Von der Tann
09:38	14,068	326	3 AP		Von der Tann
09:39	14,427	379	4 AP		Von der Tann
09:40	14,522	116	2 AP		Von der Tann
09:41	14,654	176	3 AP		Von der Tann
09:42	14,822	299	4 AP		Von der Tann
09:44	14,834	-548	1 AP		Von der Tann
09:45	13,919	-491	5 AP		Von der Tann
09:46	13,380	-462	4 AP		Von der Tann
09:47	12,911	-412	4 AP		Von der Tann
09:48	12,521	-357	4 AP		Von der Tann
09:49	12,213	-270	6 AP		Von der Tann
09:50	11,994	-163	6 AP		Von der Tann
09:51	11,887	-56	5 AP		Von der Tann
09:52	11,860	35	4 AP		Von der Tann
09:53	11,973	204	6 AP		Von der Tann
09:54	12,198	269	5 AP	1 hit	Von der Tann
09:55	12,506	345	4 AP		Von der Tann
09:56	12,888	412	5 AP		Von der Tann
09:57	13,357	510	4 AP		Von der Tann
09:58	13,848	377	4 AP	1 hit	Von der Tann
09:59	14,287	466	6 AP	rapid	Von der Tann
10:00	14,790	531	1 AP		Von der Tann
10:30	14,875	-235	2 AP		Von der Tann
10:31	14,646	-222	2 AP		Von der Tann
10:32	14,351	-288	1 AP		Von der Tann
10:33	14,096	-288	2 AP		Von der Tann
10:34	13,808	-288	2 AP		Von der Tann
10:35	13,520	-288	3 AP	1 hit	Von der Tann
10:36	13,232	-288	2 AP	rapid	Von der Tann
10:37	12,945	-287	2 AP		Von der Tann
10:38	12,657	-287	2 AP		Von der Tann
10:39	12,599	-39	2 AP		Von der Tann
10:40	12,607	0	2 SAP		Von der Tann
10:41	12,092	-282	1 SAP		Von der Tann
10:42	12,331	-211	1 SAP		Von der Tann
10:43	12,120	-210	1 SAP		Von der Tann
10:44	11,942	-177	1 SAP		Von der Tann
10:45	11,799	-143	3 SAP		Von der Tann

10:46	11,656	-143	1 SAP	Von der Tann
10:47	11,706	53	2 SAP	Von der Tann
10:48	11,809	87	2 SAP	Von der Tann
10:49	11,876	71	3 SAP	Von der Tann
10:50	12,633	762	1 SAP	Von der Tann
10:51	13,345	732	1 SAP	Von der Tann
10:52	14,100	761	1 SAP	Von der Tann
12in/40 Primary	Total	219 shells	3 hits	1.4%

Channel Fleet, Irresistible, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:04	12,658	-982	5 HE		Moltke
09:05	11,680	-967	5 HE		Moltke
09:06	10,718	-951	5 HE		Moltke
09:07	10,270	-934	6 HE		Von der Tann
09:08	9,555	-248	6 HE		Von der Tann
09:09	9,356	-162	6 HE		Von der Tann
09:10	9,270	-35	6 HE		Von der Tann
09:11	9,310	84	6 HE		Von der Tann
09:12	9,100	261	11 HE		Von der Tann
09:13	9,419	366	9 HE		Von der Tann
09:14	9,837	465	9 HE		Von der Tann
09:15	10,330	523	8 HE		Von der Tann
09:16	10,884	588	8 HE		Von der Tann
09:17	11,493	711	8 HE		Von der Tann
09:18	12,180	600	6 HE		Von der Tann
09:19	12,384	557	4 HE		Von der Tann
09:20	12,897	553	5 HE		Von der Tann
09:48	12,521	-357	7 HE		Von der Tann
09:49	12,213	-270	8 HE		Von der Tann
09:50	11,994	-163	8 HE	1 hit	Von der Tann
09:51	11,887	-56	6 HE		Von der Tann
09:52	11,860	35	7 HE	1 hit	Von der Tann
09:53	11,973	204	7 HE		Von der Tann
09:54	12,198	269	6 HE		Von der Tann
09:55	12,506	345	4 HE		Von der Tann
09:56	12,888	412	4 HE		Von der Tann
10:38	12,657	-287	4 HE		Von der Tann
10:39	12,599	-39	4 HE		Von der Tann
10:40	12,607	0	2 HE		Von der Tann
10:41	12,092	-282	1 HE		Von der Tann
10:42	12,331	-211	3 HE		Von der Tann
10:43	12,120	-210	2 HE		Von der Tann
10:44	11,942	-177	2 HE		Von der Tann
10:45	11,799	-143	2 HE		Von der Tann
10:46	11,656	-143	2 HE		Von der Tann
10:47	11,706	53	2 HE		Von der Tann
10:48	11,809	87	3 HE		Von der Tann
10:49	11,876	71	2 HE		Von der Tann
10:50	12,633	762	2 HE		Von der Tann
6in/45 Secondary	Total		201 shells	2 hits	1%

Channel Fleet, Implacable

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:03	14,526	-957	2 HE		Von der Tann
09:04	13,525	-996	1 HE		Von der Tann
09:05	12,534	-982	1 HE		Von der Tann
09:06	11,557	-967	1 HE		Von der Tann
09:07	11,092	-951	1 HE		Blucher
09:08	10,150	-934	2 HE		Blucher
09:09	9,540	-230	5 HE		Blucher
09:10	9,355	-146	4 HE		Blucher
09:11	9,268	-35	4 AP		Blucher
09:12	9,300	84	5 AP		Blucher
09:13	9,238	2	4 AP		Blucher
09:14	9,325	150	3 AP		Blucher
09:15	9,782	478	4 AP		Blucher
09:16	10,295	547	3 AP		Blucher
09:17	10,870	697	1 AP		Blucher
09:18	11,542	672	1 AP		Blucher
09:19	12,112	361	2 AP		Blucher
09:20	12,386	293	4 AP		Blucher
09:21	12,737	384	5 AP		Blucher
09:22	13,161	461	5 AP	1 hit	Blucher
09:23	13,649	259	6 AP	rapid	Blucher
09:25	13,857	-11	1 AP		Blucher
09:26	13,865	29	2 AP		Blucher
09:27	13,915	69	2 AP		Blucher
09:28	14,006	108	4 AP		Blucher
09:29	13,915	-285	1 AP		Blucher
09:30	13,667	-222	4 AP		Blucher
09:31	13,481	-157	4 AP		Blucher
09:32	13,342	-109	4 AP		Blucher
09:33	13,274	-24	4 AP		Blucher
09:34	13,265	31	3 AP		Blucher
09:35	13,332	101	3 AP		Blucher
09:36	13,475	189	4 AP		Blucher
09:37	13,444	10	4 AP		Blucher
09:38	13,524	364	4 AP		Blucher
09:40	13,833	139	4 AP		Blucher
09:41	13,995	176	3 AP		Blucher
09:42	14,192	327	1 AP		Blucher
09:43	14,490	313	1 AP		Blucher
09:44	14,688	-362	1 AP		Blucher
09:45	14,377	-511	1 AP		Blucher
09:46	13,590	-486	1 AP		Blucher
09:47	13,116	-441	5 AP		Blucher
09:48	12,708	-375	6 AP		Blucher
09:49	12,372	-290	5 AP		Blucher
09:50	12,114	-221	6 AP		Blucher
09:51	11,940	-132	6 AP		Blucher
09:52	11,852	-43	5 AP		Blucher
09:53	11,854	47	5 AP		Blucher
09:54	11,970	188	5 AP		Blucher
09:55	12,199	276	5 AP		Blucher
09:56	12,509	345	4 AP		Blucher
09:57	12,910	444	5 AP		Blucher
09:58	13,383	510	3 AP		Blucher
09:59	13,863	415	3 AP		Blucher
10:00	14,309	482	4 AP		Blucher
10:01	14,818	531	1 AP		Blucher
10:29	13,191	-798	1 AP		Blucher
10:32	11,069	-394	1 AP		Blucher
10:36	9,871	-279	1 AP		Blucher
12in/40	Primary Total		191 shells	1 hit	0.5%

Channel Fleet, Implacable, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:05	12,534	-982	4 HE		Von der Tann
09:06	11,557	-967	5 HE		Von der Tann
09:07	11,092	-951	5 HE		Blucher
09:08	10,150	-934	6 HE		Blucher
09:09	9,540	-230	6 HE		Blucher
09:10	9,355	-146	6 HE		Blucher
09:11	9,268	-35	6 HE		Blucher
09:12	9,300	84	10 HE		Blucher
09:13	9,238	2	8 HE		Blucher
09:14	9,325	150	10 HE	2 hits	Blucher
09:15	9,782	478	6 HE		Blucher
09:16	10,295	547	9 HE		Blucher
09:17	10,870	697	5 HE		Blucher
09:18	11,542	672	6 HE		Blucher
09:19	12,112	361	8 HE		Blucher
09:20	12,386	293	4 HE		Blucher
09:21	12,737	384	4 HE		Blucher
09:48	12,708	-375	5 HE		Blucher
09:49	12,372	-290	6 HE		Blucher
09:50	12,114	-221	6 HE		Blucher
09:51	11,940	-132	6 HE		Blucher
09:52	11,852	-43	6 HE		Blucher
09:53	11,854	47	6 HE		Blucher
09:54	11,970	188	7 HE		Blucher
09:55	12,199	276	6 HE		Blucher
09:56	12,509	345	4 HE		Blucher
10:30	12,335	-856	1 HE		Blucher
10:31	11,480	-856	1 HE		Blucher
10:34	10,429	-336	1 HE		Blucher
10:36	9,871	-279	1 HE		Blucher
10:37	9,580	-291	1 HE		Blucher
10:40	8,747	-281	1 HE		Blucher
10:47	6,333	-216	1 HE		Blucher
6in/45	Secondary	Total	167 shells	2 hits	1.2%

Channel Fleet, Arethusa

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:40	12,812	-1,128	2 SAP		Strassburg
08:41	11,746	-1,128	1 SAP		Strassburg
08:42	10,692	-1,097	1 SAP		Strassburg
08:43	9,669	-1,064	1 SAP		Strassburg
08:44	8,642	-1,049	4 SAP		Strassburg
08:45	7,639	-1,001	2 SAP		Strassburg
08:46	6,713	-892	4 SAP		Strassburg
08:47	5,416	-1,246	3 SAP	1 hit	Strassburg
08:48	4,224	-1,101	4 SAP		Strassburg
08:49	3,250	-732	9 SAP		Strassburg
08:50	2,861	4	8 SAP		Strassburg
08:51	3,273	763	8 SAP		Strassburg
08:53	6,235	1,347	2 SAP		Strassburg
08:54	7,721	1,493	2 SAP		Strassburg
08:56	10,889	1,609	1 SAP		Strassburg
08:57	12,172	1,315	1 SAP		Strassburg
08:58	11,378	-722	1 SAP		Strassburg
08:59	10,281	-1,079	1 SAP		Strassburg
09:00	9,164	-1,088	2 SAP		Strassburg
09:01	7,993	-1,129	2 SAP		Strassburg
09:02	7,177	-717	2 SAP		Strassburg
09:03	6,518	-520	6 SAP		Strassburg
09:04	6,138	-227	6 SAP		Strassburg
09:05	6,105	143	6 SAP		Strassburg
09:06	7,299	1,266	2 SAP		Strassburg
09:07	8,087	858	2 SAP		Strassburg
09:08	8,061	-1	1 SAP		Strassburg
09:09	8,250	202	3 SAP		Strassburg
09:10	8,455	221	2 SAP		Strassburg
09:11	8,646	211	1 SAP		Strassburg
09:12	8,874	249	1 SAP		Strassburg
09:13	9,137	279	1 SAP		Strassburg
09:14	9,275	-278	2 SAP		Strassburg
09:15	9,013	-146	1 SAP		Strassburg
09:16	10,076	1,104	1 SAP		Strassburg
09:17	10,527	484	1 SAP		Strassburg
09:18	11,115	619	1 SAP		Strassburg
09:20	12,561	42	1 SAP		Strassburg
09:23	11,382	-563	1 SAP		Strassburg
09:24	10,866	-470	1 SAP		Strassburg
09:25	10,429	-384	2 SAP		Strassburg
09:26	10,117	-242	1 SAP		Strassburg
09:27	9,482	-556	2 SAP		Strassburg
09:28	9,066	-330	2 SAP		Strassburg
09:29	8,845	-113	1 SAP		Strassburg
09:30	8,832	101	2 SAP		Strassburg
09:31	9,028	290	2 SAP		Strassburg
09:32	9,382	436	3 SAP		Strassburg
09:33	9,879	566	1 SAP		Strassburg
09:34	10,516	706	2 SAP		Strassburg
09:36	12,117	886	1 SAP		Strassburg
09:39	12,780	156	1 SAP		Strassburg
09:41	13,123	184	1 SAP		Strassburg
09:42	12,635	-436	2 SAP		Strassburg
09:45	12,670	150	2 SAP		Strassburg
09:47	13,006	91	1 SAP		Strassburg
09:48	13,162	218	1 SAP		Strassburg
09:49	13,428	322	1 SAP		Strassburg
10:08	9,292	-94	2 HE		Flot-I
10:09	9,197	-56	1 HE		Flot-I
10:10	9,118	-41	1 HE		Flot-I
10:11	9,094	35	1 HE		Flot-I
10:12	9,055	15	1 HE		Flot-I
10:13	9,187	187	2 HE		Flot-I
10:14	9,446	311	1 HE		Flot-I
10:16	10,454	617	1 HE		Flot-I
10:18	12,342	961	1 HE		Flot-I
10:19	9,665	-113	1 HE		Flot-II
10:20	9,563	-84	2 HE		Flot-II

10:21	9,492	-56	1 HE	Flot-II
10:22	9,793	313	2 HE	Flot-II
10:23	10,772	983	1 HE	Flot-II
10:24	11,799	1,033	1 HE	Flot-II
10:42	13,329	-466	1 SAP	Strassburg
10:43	12,930	-432	1 SAP	Strassburg
10:45	12,233	-365	1 SAP	Strassburg
10:46	11,934	-332	1 SAP	Strassburg
10:48	12,247	207	1 SAP	Strassburg
10:49	12,445	216	1 SAP	Strassburg
10:51	12,916	272	1 SAP	Strassburg
6in/45 Primary	Total	155 shells	1 hit	0.6%

Channel Fleet, Arethusa, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:40	12,812	-1,128	3 HE		Strassburg
08:41	11,746	-1,128	4 HE		Strassburg
08:42	10,692	-1,097	3 HE		Strassburg
08:43	9,669	-1,064	5 HE		Strassburg
08:44	8,642	-1,049	5 HE		Strassburg
08:45	7,639	-1,001	5 HE		Strassburg
08:46	6,713	-892	6 HE		Strassburg
08:48	4,224	-1,101	10 HE		Strassburg
08:49	3,250	-732	13 HE		Strassburg
08:50	2,861	4	13 HE		Strassburg
08:51	3,273	763	11 HE		Strassburg
08:53	6,235	1,347	5 HE		Strassburg
08:57	12,172	1,315	3 HE		Strassburg
08:58	11,378	-722	1 HE		Strassburg
08:59	10,281	-1,079	3 HE		Strassburg
09:00	9,164	-1,088	5 HE		Strassburg
09:01	7,993	-1,129	6 HE		Strassburg
09:02	7,177	-717	6 HE		Strassburg
09:03	6,518	-520	8 HE		Strassburg
09:04	6,138	-227	8 HE		Strassburg
09:05	6,105	143	9 HE	1 hit	Strassburg
09:06	7,299	1,266	6 HE		Strassburg
09:07	8,087	858	5 HE		Strassburg
09:08	8,061	-1	4 HE		Strassburg
09:09	8,250	202	5 HE		Strassburg
09:10	8,455	221	6 HE		Strassburg
09:11	8,646	211	4 HE		Strassburg
09:12	8,874	249	3 HE		Strassburg
09:13	9,137	279	3 HE		Strassburg
09:14	9,275	-278	4 HE		Strassburg
09:15	9,013	-146	5 HE		Strassburg
09:21	12,619	130	1 HE		Strassburg
09:24	10,866	-470	3 HE		Strassburg
09:25	10,429	-384	3 HE		Strassburg
09:26	10,117	-242	4 HE		Strassburg
09:27	9,482	-556	5 HE		Strassburg
09:28	9,066	-330	4 HE		Strassburg
09:29	8,845	-113	5 HE		Strassburg
09:30	8,832	101	4 HE		Strassburg
09:31	9,028	290	5 HE		Strassburg
09:32	9,382	436	4 HE		Strassburg
09:33	9,879	566	4 HE		Strassburg
09:34	10,516	706	3 HE		Strassburg
09:35	11,269	799	2 HE		Strassburg
09:36	12,117	886	2 HE		Strassburg
09:41	13,123	184	1 HE		Strassburg
09:42	12,635	-436	3 HE		Strassburg
09:43	12,571	-24	1 HE		Strassburg
09:44	12,572	63	1 HE		Strassburg
09:45	12,670	150	3 HE		Strassburg
09:46	12,964	288	1 HE		Strassburg
09:47	13,006	91	3 HE		Strassburg
09:48	13,162	218	2 HE		Strassburg
09:49	13,428	322	2 HE		Strassburg
10:07	9,422	333	2 HE		Flot-I
10:13	9,187	187	3 HE		Flot-I
10:14	9,446	311	3 HE		Flot-I
10:15	9,877	484	2 HE		Flot-I
10:16	10,454	617	2 HE		Flot-I
10:17	11,507	976	1 HE		Flot-I
10:18	12,342	961	2 HE		Flot-I
10:19	9,665	-113	4 HE		Flot-II
10:25	12,849	1,053	1 HE		Flot-II
10:51	12,916	272	2 HE		Strassburg
10:52	13,350	445	1 HE		Strassburg
4in/45	Secondary Total		266 shells	1 hit	0.4%

Channel Fleet, Aurora

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:37	13,389	-1,459	1 SAP		Strassburg
08:38	11,959	-1,485	2 SAP		Strassburg
08:39	10,541	-1,471	1 SAP		Strassburg
08:40	9,140	-1,445	2 SAP		Strassburg
08:41	7,765	-1,416	2 SAP		Strassburg
08:42	6,391	-1,418	3 SAP		Strassburg
08:43	5,006	-1,420	3 SAP		Strassburg
08:44	9,444	-1,568	2 SAP		Graudenz
08:45	7,938	-1,442	2 SAP		Graudenz
08:46	6,600	-1,224	1 SAP		Graudenz
08:47	7,077	698	2 SAP		Graudenz
08:48	7,503	583	5 SAP		Graudenz
08:49	8,229	854	2 SAP		Graudenz
08:50	9,175	1,032	2 SAP		Graudenz
08:51	10,281	96	1 SAP		Graudenz
08:52	10,567	515	2 SAP		Graudenz
08:53	11,449	907	1 SAP		Graudenz
08:54	12,965	1,521	1 SAP		Graudenz
09:15	12,186	-1,200	1 SAP		Graudenz
09:17	9,360	-1,207	2 SAP		Graudenz
09:18	8,135	-1,158	2 SAP		Graudenz
09:19	7,008	-1,080	3 SAP		Graudenz
09:20	6,971	131	4 SAP		Graudenz
09:21	7,398	579	4 SAP		Graudenz
09:23	6,995	-37	2 SAP		Graudenz
09:24	6,928	-26	3 SAP		Graudenz
09:25	6,949	60	1 SAP		Graudenz
09:26	7,042	129	2 SAP		Graudenz
09:27	7,188	191	2 SAP		Graudenz
09:28	7,431	258	2 SAP		Graudenz
09:29	7,692	279	4 SAP		Graudenz
09:30	7,983	302	1 SAP		Graudenz
09:31	8,096	116	4 SAP		Graudenz
09:32	8,272	265	4 SAP		Graudenz
09:33	8,609	399	3 SAP		Graudenz
09:34	9,026	439	2 SAP		Graudenz
09:35	9,466	452	3 SAP		Graudenz
09:36	9,384	-51	1 SAP		Graudenz
09:37	9,562	639	2 SAP		Graudenz
09:39	11,139	803	1 SAP		Graudenz
09:41	12,853	859	1 SAP		Graudenz
09:46	13,102	-162	1 SAP		Graudenz
09:47	13,067	-71	1 SAP		Graudenz
09:48	13,040	-14	1 SAP		Graudenz
09:49	12,977	21	1 SAP		Graudenz
09:50	13,088	187	1 SAP		Graudenz
10:09	9,693	-71	2 HE		Flot-I
10:10	9,607	-41	1 HE		Flot-I
10:11	9,569	17	1 HE		Flot-I
10:13	9,643	170	1 HE		Flot-I
10:14	9,878	277	1 HE		Flot-I
10:15	10,241	409	1 HE		Flot-I
10:16	10,781	584	2 HE		Flot-I
10:17	11,200	718	1 HE		Flot-I
10:18	11,909	868	1 HE		Flot-I
10:20	9,089	-94	2 HE		Flot-II
10:21	9,010	-65	2 HE		Flot-II
10:22	9,314	342	1 HE		Flot-II
10:23	10,318	997	1 HE		Flot-II
10:24	11,326	1,037	1 HE		Flot-II
10:25	12,382	1,059	1 HE		Flot-II
10:41	13,296	-433	1 SAP		Strassburg
10:43	12,432	-432	1 SAP		Strassburg
10:44	12,067	-398	1 SAP		Strassburg
10:46	11,436	-332	1 SAP		Strassburg
10:47	11,560	148	1 SAP		Strassburg
10:49	11,960	216	1 SAP		Strassburg
10:50	12,187	239	1 SAP		Strassburg
10:52	12,888	455	1 SAP		Strassburg

6in/45 Primary Total 121 shells 0 hits

Channel Fleet, Aurora, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:37	13,389	-1,459	1 SAP		Strassburg
08:44	9,444	-1,568	4 HE		Graudenz
08:45	7,938	-1,442	6 HE		Graudenz
08:46	6,600	-1,224	3 HE		Graudenz
08:47	7,077	698	3 HE		Graudenz
08:48	7,503	583	4 HE		Graudenz
08:49	8,229	854	4 HE		Graudenz
08:50	9,175	1,032	3 HE		Graudenz
08:51	10,281	96	3 HE		Graudenz
09:15	12,186	-1,200	2 HE		Graudenz
09:20	6,971	131	3 HE		Graudenz
09:21	7,398	579	5 HE		Graudenz
09:23	6,995	-37	4 HE		Graudenz
09:24	6,928	-26	5 HE		Graudenz
09:25	6,949	60	3 HE		Graudenz
09:26	7,042	129	3 HE		Graudenz
09:27	7,188	191	3 HE		Graudenz
09:28	7,431	258	3 HE		Graudenz
09:29	7,692	279	4 HE		Graudenz
09:30	7,983	302	3 HE		Graudenz
09:31	8,096	116	4 HE		Graudenz
09:32	8,272	265	3 HE		Graudenz
09:33	8,609	399	3 HE		Graudenz
09:34	9,026	439	2 HE		Graudenz
09:35	9,466	452	3 HE		Graudenz
09:37	9,562	639	3 HE		Graudenz
09:38	10,250	833	1 HE		Graudenz
09:39	11,139	803	2 HE		Graudenz
09:40	11,977	819	2 HE		Graudenz
09:41	12,853	859	1 HE		Graudenz
09:45	13,440	-432	1 HE		Graudenz
09:46	13,102	-162	2 HE		Graudenz
09:47	13,067	-71	3 HE		Graudenz
09:48	13,040	-14	2 HE		Graudenz
09:49	12,977	21	2 HE		Graudenz
09:50	13,088	187	3 HE		Graudenz
09:51	13,396	393	1 HE		Graudenz
10:13	9,643	170	2 HE		Flot-I
10:14	9,878	277	3 HE		Flot-I
10:15	10,241	409	1 HE		Flot-I
10:16	10,781	584	4 HE		Flot-I
10:17	11,200	718	2 HE		Flot-I
10:18	11,909	868	2 HE		Flot-I
10:24	11,326	1,037	2 HE		Flot-II
10:25	12,382	1,059	1 HE		Flot-II
10:26	13,445	1,070	1 HE		Flot-II
10:51	12,446	272	2 HE		Strassburg
10:52	12,888	455	1 HE		Strassburg
4in/45 Secondary Total			128 shells	0 hits	

Channel Fleet, Undaunted

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:41	12,684	-1,128	2 SAP		Strassburg
08:42	11,556	-1,190	1 SAP		Strassburg
08:44	9,381	-1,115	1 SAP		Strassburg
08:45	8,310	-1,096	2 SAP		Strassburg
08:46	7,281	-1,025	4 SAP		Strassburg
08:47	6,279	-894	5 SAP		Strassburg
08:48	5,473	-1,107	2 SAP		Strassburg
08:49	4,426	-843	4 SAP		Strassburg
08:50	3,760	-401	10 SAP	1 hit	Strassburg
08:51	3,687	249	10 SAP	1 hit	Strassburg
08:53	5,312	1,555	1 SAP		Strassburg
08:54	6,777	1,419	2 SAP		Strassburg
08:55	8,263	1,430	1 SAP		Strassburg
08:56	9,795	1,536	1 SAP		Strassburg
08:57	11,218	1,437	1 SAP		Strassburg
08:59	11,780	-767	1 SAP		Strassburg
09:00	11,076	-1,111	1 SAP		Strassburg
09:01	9,929	-1,305	1 SAP		Strassburg
09:02	8,636	-1,233	2 SAP		Strassburg
09:03	7,332	-1,399	3 SAP		Strassburg
09:04	6,359	-864	2 SAP		Strassburg
09:05	5,678	-518	7 SAP	1 hit	Strassburg
09:06	6,350	-176	1 SAP		Strassburg
09:07	6,070	800	2 SAP		Strassburg
09:08	7,031	1,262	2 SAP		Strassburg
09:09	8,408	1,472	2 SAP		Strassburg
09:10	9,943	1,583	1 SAP		Strassburg
09:12	10,470	44	2 SAP		Strassburg
09:14	10,534	-555	1 SAP		Strassburg
09:15	10,011	-441	2 SAP		Strassburg
09:16	9,692	-204	1 SAP		Strassburg
09:17	9,075	126	1 SAP		Strassburg
09:18	9,304	709	2 SAP		Strassburg
09:19	10,066	725	1 SAP		Strassburg
09:21	11,719	874	1 SAP		Strassburg
09:25	11,303	-423	1 SAP		Strassburg
09:26	10,933	-303	1 SAP		Strassburg
09:27	10,238	-638	1 SAP		Strassburg
09:28	9,740	-419	2 SAP		Strassburg
09:29	9,402	-231	2 SAP		Strassburg
09:30	9,259	-42	4 SAP		Strassburg
09:31	9,315	148	3 SAP		Strassburg
09:32	9,581	328	3 SAP		Strassburg
09:33	9,987	463	3 SAP		Strassburg
09:34	10,517	587	1 SAP		Strassburg
09:35	11,169	706	2 SAP		Strassburg
09:36	11,929	799	1 SAP		Strassburg
09:43	12,974	-567	1 SAP		Strassburg
09:44	12,496	-244	1 SAP		Strassburg
09:45	12,318	123	1 SAP		Strassburg
09:46	12,495	280	1 SAP		Strassburg
09:47	12,498	57	2 SAP		Strassburg
09:48	12,859	133	2 SAP		Strassburg
09:49	13,039	239	2 SAP		Strassburg
09:50	13,330	343	1 SAP		Strassburg
10:38	13,395	-183	1 SAP		Strassburg
10:42	12,332	-465	1 SAP		Strassburg
10:43	11,934	-432	2 SAP		Strassburg
10:44	11,569	-398	1 SAP		Strassburg
10:46	10,938	-332	1 SAP		Strassburg
10:47	11,066	148	1 SAP		Strassburg
10:48	11,267	217	1 SAP		Strassburg
10:49	11,476	227	1 SAP		Strassburg
10:50	11,710	250	1 SAP		Strassburg
10:51	11,979	283	1 SAP		Strassburg
10:52	12,429	465	1 SAP		Strassburg
10:53	13,125	706	1 SAP		Strassburg
6in/45 Primary	Total		131 shells	3 hits	2.3%

Channel Fleet, Undaunted, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:41	12,684	-1,128	3 HE		Strassburg
08:42	11,556	-1,190	3 HE		Strassburg
08:43	10,455	-1,162	1 HE		Strassburg
08:44	9,381	-1,115	3 HE		Strassburg
08:45	8,310	-1,096	4 HE		Strassburg
08:46	7,281	-1,025	6 HE		Strassburg
08:47	6,279	-894	6 HE		Strassburg
08:48	5,473	-1,107	7 HE		Strassburg
08:49	4,426	-843	10 HE		Strassburg
08:50	3,760	-401	14 HE		Strassburg
08:51	3,687	249	15 HE	1 hit	Strassburg
08:52	4,471	533	9 HE		Strassburg
08:54	6,777	1,419	5 HE		Strassburg
08:58	11,636	323	2 HE		Strassburg
08:59	11,780	-767	1 HE		Strassburg
09:00	11,076	-1,111	3 HE		Strassburg
09:02	8,636	-1,233	5 HE		Strassburg
09:03	7,332	-1,399	6 HE		Strassburg
09:04	6,359	-864	8 HE		Strassburg
09:05	5,678	-518	9 HE		Strassburg
09:07	6,070	800	3 HE		Strassburg
09:08	7,031	1,262	7 HE		Strassburg
09:09	8,408	1,472	6 HE		Strassburg
09:10	9,943	1,583	2 HE		Strassburg
09:11	10,435	542	1 HE		Strassburg
09:12	10,470	44	3 HE		Strassburg
09:13	10,560	111	3 HE		Strassburg
09:14	10,534	-555	2 HE		Strassburg
09:15	10,011	-441	4 HE		Strassburg
09:16	9,692	-204	4 HE		Strassburg
09:17	9,075	126	4 HE		Strassburg
09:23	12,333	-108	1 HE		Strassburg
09:24	11,784	-477	1 HE		Strassburg
09:25	11,303	-423	1 HE		Strassburg
09:26	10,933	-303	2 HE		Strassburg
09:27	10,238	-638	4 HE		Strassburg
09:28	9,740	-419	5 HE		Strassburg
09:29	9,402	-231	5 HE		Strassburg
09:30	9,259	-42	4 HE		Strassburg
09:31	9,315	148	5 HE		Strassburg
09:32	9,581	328	4 HE		Strassburg
09:33	9,987	463	4 HE		Strassburg
09:34	10,517	587	4 HE		Strassburg
09:35	11,169	706	3 HE		Strassburg
09:36	11,929	799	2 HE		Strassburg
09:38	13,429	474	1 HE		Strassburg
09:43	12,974	-567	2 HE		Strassburg
09:44	12,496	-244	1 HE		Strassburg
09:45	12,318	123	3 HE		Strassburg
09:46	12,495	280	1 HE		Strassburg
09:47	12,498	57	3 HE		Strassburg
09:48	12,859	133	3 HE		Strassburg
09:49	13,039	239	2 HE		Strassburg
09:50	13,330	343	2 HE		Strassburg
10:51	11,979	283	3 HE		Strassburg
10:52	12,429	465	3 HE		Strassburg
10:53	13,125	706	3 HE		Strassburg
4in/45	Secondary	Total	231 shells	1 hit	0.4%

Channel Fleet, 1st Flot

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
10:03	8,365	-875	2 HE		Flot-II
10:33	7,856	-589	1 HE		Flot-I
10:34	7,278	-578	2 HE		Flot-I
10:35	6,716	-560	23 HE	1 hit	Flot-I
10:36	5,989	-595	2 HE		Flot-II
10:37	5,835	-379	32 HE		Flot-I
10:38	6,338	87	2 HE		Flot-I
10:39	6,319	338	23 HE		Flot-II
10:40	5,956	-725	3 HE		Flot-II
10:41	5,813	-323	35 HE		Flot-I
10:42	5,135	-498	40 HE		Flot-II
10:43	4,928	-181	39 HE		Flot-II
10:44	5,249	375	32 HE	1 hit	Flot-II
10:45	5,721	322	2 HE		Flot-I
10:46	6,062	365	2 HE		Flot-I
10:48	8,256	1,037	1 HE		Flot-I
10:49	5,072	181	12 HE		Graudenz
10:50	5,627	568	2 HE		Graudenz
10:51	6,269	604	2 HE		Stralsund
10:52	5,830	482	2 HE		Kolberg
10:53	6,457	605	2 HE		Kolberg
10:54	7,263	809	1 HE		Kolberg
10:55	8,082	797	1 HE		Kolberg
4in/40 Primary	Total		263 shells	2 hits	0.8%

Channel Fleet, 2nd Flot

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:45	7,686	-1,329	2 HE		Strassburg
08:46	6,396	-1,320	2 HE		Strassburg
08:47	6,226	-88	1 HE		Strassburg
08:48	6,121	-104	2 HE		Strassburg
08:49	6,081	6	1 HE		Strassburg
08:50	6,209	181	3 HE		Strassburg
08:51	6,509	358	2 HE		Strassburg
08:52	7,732	1,263	2 HE		Strassburg
10:03	7,901	-1,398	1 HE		Flot-II
10:04	8,107	358	1 HE		Flot-II
10:39	7,342	-1,326	2 HE		Strassburg
10:40	6,671	-1,744	2 HE		Flot-II
10:41	5,762	-739	30 HE	1 hit	Flot-II
10:42	3,298	-731	10 HE		Strassburg
10:43	4,926	-681	13 HE		Flot-I
10:44	4,635	-601	41 HE	1 hit	Flot-I
10:45	4,485	-397	47 HE		Flot-I
10:46	4,450	-224	35 HE		Flot-I
10:47	2,335	243	43 HE	2 hits	Strassburg
10:48	6,309	927	1 HE		Flot-I
10:49	7,262	988	2 HE		Flot-I
10:50	8,230	994	1 HE		Flot-I
10:51	3,954	424	19 HE		Stralsund
10:52	4,425	488	18 HE		Graudenz
10:53	4,631	433	18 HE		Kolberg
10:54	5,582	866	2 HE		Stralsund
10:55	6,001	714	2 HE		Kolberg
10:56	6,625	640	2 HE		Kolberg
10:57	7,113	615	1 HE		Kolberg
10:58	7,692	611	2 HE		Kolberg
10:59	8,345	778	1 HE		Kolberg
4in/40 Primary	Total		309 shells	4 hits	1.3%

Channel Fleet, 10th Flot

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:43	7,865	-1,020	2 HE		Strassburg
08:44	6,892	-990	2 HE		Strassburg
08:45	5,984	-895	2 HE		Strassburg
08:46	5,212	-693	13 HE		Strassburg
08:47	5,584	422	1 HE		Strassburg
08:48	5,363	-219	5 HE		Strassburg
08:49	5,621	293	2 HE		Strassburg
08:50	6,003	406	2 HE		Strassburg
08:51	6,491	509	1 HE		Strassburg
10:26	5,989	123	21 HE		Flot-II
10:27	6,286	358	15 HE		Flot-II
10:28	6,643	424	19 HE		Flot-II
10:29	7,271	280	12 HE		Flot-II
10:30	7,279	-153	15 HE	1 hit	Flot-I
10:31	7,225	-98	14 HE		Flot-I
10:32	6,946	-278	2 HE		Flot-I
10:33	6,684	-64	2 HE		Strassburg
10:34	6,438	-526	20 HE		Flot-II
10:35	5,964	-469	21 HE		Flot-II
10:36	5,438	-539	2 HE		Flot-I
10:37	4,571	-610	27 HE		Flot-II
10:38	5,166	232	18 HE		Flot-I
10:39	4,881	-498	3 HE		Strassburg
10:40	4,588	-759	22 HE		Flot-II
10:41	4,117	-510	20 HE		Flot-I
10:42	3,372	-645	32 HE		Flot-II
10:43	3,664	326	22 HE		Flot-I
10:44	3,983	643	18 HE		Flot-II
10:45	4,277	352	2 HE		Strassburg
10:46	4,689	446	9 HE		Strassburg
10:47	7,373	1,589	1 HE		Flot-I
10:49	5,062	652	8 HE		Stralsund
10:50	5,339	422	3 HE		Graudenz
10:51	5,088	26	8 HE		Kolberg
10:52	6,583	690	1 HE		Graudenz
10:53	7,273	701	2 HE		Graudenz
10:54	6,659	826	2 HE		Kolberg
10:55	7,491	803	2 HE		Kolberg
10:56	8,267	777	1 HE		Kolberg
4in/40 Primary	Total		374 shells	1 hit	0.3%

Channel Fleet, 11th Flot

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
10:03	8,740	-1,456	1 HE		Flot-I
10:04	8,818	217	1 HE		Flot-I
10:05	9,185	419	1 HE		Flot-I
10:29	8,883	-437	1 HE		Flot-II
10:30	7,666	-1,507	2 HE		Strassburg
10:31	7,894	-348	10 HE		Flot-II
10:33	6,845	-451	1 HE		Flot-II
10:34	6,265	-530	2 HE		Flot-II
10:35	5,777	-456	2 HE		Flot-II
10:36	5,808	-492	8 HE		Flot-I
10:37	5,088	-716	2 HE		Flot-I
10:38	4,571	-417	3 HE		Flot-I
10:39	4,541	-395	2 HE		Flot-I
12pdr	Primary	Total	36 shells	0 hits	

Hochseeflotte, Seydlitz

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:59	16,325	-1,025	1 SAP		Queen
09:00	15,304	-1,020	2 SAP		Queen
09:01	14,290	-1,009	2 SAP		Queen
09:02	13,342	-936	4 SAP		Queen
09:03	12,424	-902	6 SAP		Queen
09:04	11,457	-959	3 AP		Queen
09:05	10,510	-934	3 AP		Queen
09:06	9,587	-906	4 AP		Queen
09:07	9,390	-140	8 AP		Queen
09:08	9,265	-63	19 AP	3 hits	Queen
09:09	9,260	52	21 AP	3 hits	Queen
09:10	9,377	172	12 AP	2 hits	Queen
09:11	9,622	296	14 AP	2 hits	Queen
09:12	9,971	400	15 AP	1 hit	Queen
09:13	10,416	481	10 AP		Queen
09:14	10,933	552	10 AP		Queen
09:15	11,505	601	6 AP	1 hit	Queen
09:16	12,127	639	6 AP	1 hit	Queen
09:17	11,287	-397	1 AP		Prince of Wales
09:18	11,410	168	16 AP		Prince of Wales
09:19	12,009	202	13 AP		Prince of Wales
09:20	12,324	303	14 AP	1 hit	Prince of Wales
09:21	12,711	397	21 AP	rapid 1 hit	Prince of Wales
09:22	13,137	457	21 AP	rapid 1 hit	Prince of Wales
09:23	13,573	466	9 AP		Prince of Wales
09:24	14,076	531	8 AP		Prince of Wales
09:25	14,656	611	7 AP		Prince of Wales
09:26	15,186	20	5 AP		Prince of Wales
09:27	14,882	-273	5 AP		Prince of Wales
09:28	14,607	-247	8 AP	1 hit	Prince of Wales
09:29	14,372	-201	17 AP	rapid	Prince of Wales
09:30	14,319	-157	9 AP	2 hits	Prince of Wales
09:31	14,195	-91	15 AP	rapid	Prince of Wales
09:32	14,134	-25	9 AP		Prince of Wales
09:33	14,136	42	8 AP		Prince of Wales
09:34	14,166	96	6 AP		Prince of Wales
09:35	14,281	164	7 AP		Prince of Wales
09:36	14,458	223	6 AP		Prince of Wales
09:37	14,713	291	5 AP		Prince of Wales
09:38	15,031	341	5 AP		Prince of Wales
09:39	15,408	407	3 AP		Prince of Wales
09:40	15,790	103	1 AP		Prince of Wales
09:41	15,960	164	2 AP		Prince of Wales
09:42	15,296	-640	1 AP		Prince of Wales
09:43	14,706	-601	7 AP		Prince of Wales
09:44	14,110	-539	7 AP		Prince of Wales
09:45	13,533	-501	7 AP		Prince of Wales
09:46	13,039	-457	9 AP		Prince of Wales
09:47	12,609	-392	9 AP		Prince of Wales
09:48	12,251	-325	12 AP		Prince of Wales
09:49	11,971	-238	22 AP	rapid 1 hit	Prince of Wales
09:50	11,775	-150	24 AP	rapid 4 hits	Prince of Wales
09:51	11,666	-61	13 AP	2 hits	Prince of Wales
09:52	11,700	81	25 AP	rapid 4 hits	Prince of Wales
09:53	11,824	171	24 AP	rapid 1 hit	Prince of Wales
09:54	12,035	259	15 AP	1 hit	Prince of Wales
09:55	12,330	328	26 AP	rapid 2 hits	Prince of Wales
09:56	12,687	397	23 AP	rapid 2 hits	Prince of Wales
09:57	12,393	-273	14 AP	1 hit	Prince of Wales
09:58	12,302	-85	30 AP	rapid 2 hits	Prince of Wales
09:59	13,166	387	2 AP		Bulwark
10:00	13,575	433	14 AP		Bulwark
10:01	14,039	492	12 AP		Bulwark
10:02	14,624	604	8 SAP		Bulwark
10:03	15,278	673	7 SAP		Bulwark
10:04	15,973	714	5 SAP		Bulwark
10:05	16,705	752	2 SAP		Bulwark
10:08	16,427	-458	3 SAP		Bulwark
10:09	15,963	-447	6 SAP		Bulwark

10:10	15,520	-412	7	SAP			Bulwark
10:11	15,126	-369	7	SAP			Bulwark
10:12	15,300	189	9	AP			Bulwark
10:13	15,413	132	8	AP			Bulwark
10:14	15,589	187	9	AP		1 hit	Bulwark
10:15	15,826	255	16	AP	rapid		Bulwark
10:16	16,126	311	6	AP			Bulwark
10:17	16,059	-59	2	SAP			Bulwark
10:18	16,003	-72	2	SAP			Bulwark
10:19	15,968	-24	3	SAP			Bulwark
10:20	15,950	-6	5	SAP			Bulwark
10:21	15,951	13	6	SAP			Bulwark
10:23	15,281	-310	2	SAP			Bulwark
10:24	15,054	-308	2	SAP			Bulwark
10:25	14,847	-205	2	SAP			Bulwark
10:26	14,527	-223	3	SAP			Bulwark
10:27	14,223	-247	3	SAP			Bulwark
10:28	13,981	-235	4	SAP			Bulwark
10:29	13,748	-229	3	SAP			Bulwark
10:30	13,524	-216	4	SAP			Bulwark
10:31	13,310	-209	5	SAP			Bulwark
10:40	11,121	-102	9	SAP			Bulwark
10:47	10,007	53	6	SAP			Bulwark
10:48	10,110	87	8	SAP			Bulwark
10:49	10,180	77	10	AP			Bulwark
10:50	10,848	676	1	AP			Bulwark
10:51	11,503	675	11	AP			Bulwark
10:52	12,521	1,018	1	SAP			Bulwark
10:53	13,474	986	5	SAP			Bulwark
10:54	14,492	1,018	4	SAP			Bulwark
10:55	14,785	298	1	AP			Bulwark
10:56	14,965	165	5	AP		1 hit	Bulwark
10:57	15,724	758	1	AP			Bulwark
10:58	16,409	702	1	SAP		1 hit	Bulwark
10:59	17,125	727	2	SAP			Bulwark
28cm/50 Primary Total			867	shells	42	hits	4.8%

Hochseeflotte, Seydlitz, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:46	14,639	-1,416	4 HE		Aurora
08:47	13,491	-1,115	1 HE		Aurora
08:49	11,490	-931	4 HE		Aurora
08:50	10,607	-842	8 HE		Aurora
08:51	9,820	-716	8 HE		Aurora
08:52	9,175	-567	8 HE		Aurora
08:53	8,703	-386	11 HE		Aurora
08:54	8,434	-150	10 HE		Aurora
08:55	8,397	78	11 HE		Aurora
08:56	8,596	322	12 HE		Aurora
08:57	9,014	510	12 HE		Aurora
08:58	9,624	689	11 HE		Aurora
08:59	10,391	834	10 HE		Aurora
09:00	11,320	-537	7 HE		Arethusa
09:01	10,790	-521	7 HE		Arethusa
09:02	10,645	-122	2 HE		Arethusa
09:03	10,524	-94	1 HE		Arethusa
09:04	10,465	-49	1 HE		Arethusa
09:05	10,447	-11	2 HE		Arethusa
09:06	9,226	-1,315	9 HE		Undaunted
09:07	8,242	214	4 HE		Undaunted
09:08	8,600	614	12 HE		Undaunted
09:09	9,256	749	6 HE		Undaunted
09:10	10,037	834	3 HE		Undaunted
09:11	9,968	32	7 HE		Undaunted
09:13	8,651	228	8 HE		Arethusa
09:14	8,968	409	9 HE		Arethusa
09:15	9,473	587	8 HE		Arethusa
09:16	9,821	486	6 HE		Undaunted
09:17	9,955	772	6 HE		Undaunted
09:18	10,715	935	3 HE		Undaunted
09:19	11,539	768	8 HE		Undaunted
09:20	12,363	849	2 HE		Undaunted
09:21	13,213	871	1 HE		Undaunted
09:22	14,086	957	2 HE		Undaunted
09:23	14,108	112	1 HE		Undaunted
09:24	13,664	-384	3 HE		Undaunted
09:25	12,408	24	1 HE		Aurora
09:26	12,428	32	1 HE		Aurora
09:27	12,273	-155	1 HE		Aurora
09:28	12,130	-119	2 HE		Aurora
09:29	11,020	-214	7 HE		Arethusa
09:30	10,874	-85	9 HE		Arethusa
09:31	10,867	65	2 HE		Arethusa
09:32	10,965	159	3 HE		Arethusa
09:33	11,166	263	6 HE		Arethusa
09:34	11,487	382	6 HE		Arethusa
09:35	11,917	478	3 HE		Arethusa
09:36	12,444	571	1 HE		Arethusa
09:37	12,395	-20	1 HE		Arethusa
09:38	12,362	-124	1 HE		Arethusa
09:39	12,282	-103	2 HE		Arethusa
09:40	12,187	-87	1 HE		Arethusa
09:41	12,108	-71	3 HE		Arethusa
09:43	11,238	-237	3 HE		Arethusa
09:44	11,006	-483	5 HE		Undaunted
09:45	10,554	-176	8 HE		Undaunted
09:46	10,418	-48	9 HE		Undaunted
09:47	10,387	29	9 HE		Undaunted
09:48	10,670	65	7 HE		Undaunted
09:49	10,790	172	9 HE		Undaunted
09:50	11,005	259	9 HE		Undaunted
09:51	11,310	345	8 HE		Undaunted
09:52	11,747	477	6 HE		Undaunted
09:53	12,254	539	2 HE		Undaunted
09:54	12,825	599	2 HE		Undaunted
09:55	13,451	657	2 HE		Undaunted
09:56	14,125	697	1 HE		Undaunted
09:57	14,655	557	2 HE		Undaunted

10:15	13,075	-1,173	3 HE		10th Flot
10:16	12,233	-555	3 HE		10th Flot
10:18	11,570	-570	1 HE		10th Flot
10:19	11,240	-504	1 HE		10th Flot
10:20	10,930	-427	1 HE		10th Flot
10:21	10,688	-241	1 HE		10th Flot
10:23	10,309	-156	1 HE		10th Flot
10:24	9,689	-389	1 HE		10th Flot
10:25	9,269	-419	1 HE		10th Flot
10:26	8,738	-372	2 HE		10th Flot
10:27	8,526	-213	2 HE		10th Flot
10:28	8,358	-167	1 HE		10th Flot
10:29	8,443	-372	2 HE		10th Flot
10:30	7,599	-1,474	12 HE		11th Flot
10:31	6,135	-1,454	14 HE		11th Flot
10:32	5,549	-554	3 HE		11th Flot
10:33	5,188	-393	4 HE		11th Flot
10:34	4,902	-467	4 HE		11th Flot
10:35	4,547	-354	4 HE		11th Flot
10:36	4,299	-244	5 HE		11th Flot
10:37	4,124	-172	4 HE		11th Flot
10:38	4,021	-100	25 HE		11th Flot
10:39	3,922	-155	16 HE	1 hit	11th Flot
10:40	6,281	-401	2 HE		10th Flot
10:41	5,557	-1,499	3 HE		2nd Flot
10:42	4,974	-585	4 HE		2nd Flot
10:43	4,577	-397	4 AP		2nd Flot
10:44	4,627	-499	4 AP		2nd Flot
10:45	4,555	-399	4 AP	1 hit	2nd Flot
10:46	4,522	-296	4 AP		2nd Flot
10:47	4,649	-24	16 AP	1 hit	2nd Flot
10:48	4,759	101	20 AP	1 hit	2nd Flot
10:49	4,926	183	18 AP	1 hit	2nd Flot
10:50	5,783	873	1 AP		2nd Flot
10:51	6,241	698	14 AP	1 hit	2nd Flot
10:52	7,256	1,015	1 AP		2nd Flot
10:53	8,205	983	2 AP		2nd Flot
10:54	9,221	1,016	2 AP		2nd Flot
10:55	9,537	326	2 AP		2nd Flot
10:56	9,731	181	7 AP		2nd Flot
10:57	10,484	754	1 AP		2nd Flot
10:58	11,153	699	2 AP		2nd Flot
10:59	11,900	775	5 AP		2nd Flot
11:00	12,422	542	3 AP		10th Flot
11:01	13,001	605	2 AP		10th Flot
11:02	13,846	851	2 AP		10th Flot
15cm/45 Secondary Total				594 shells	6 hits 1%

Hochseeflotte, Moltke

Local Time	Range Yards	Range Rate	Shells Fired		Result	Target
08:59	16,825	-1,025	1 SAP			Queen
09:00	15,804	-1,020	1 SAP			Queen
09:01	14,790	-1,009	2 SAP			Queen
09:02	13,838	-940	5 SAP		1 hit	Queen
09:03	12,917	-902	3 AP			Queen
09:04	11,954	-959	3 AP			Queen
09:06	11,889	-842	3 AP			Prince of Wales
09:07	9,579	-230	1 SAP			Formidable
09:08	9,366	-162	17 SAP			Formidable
09:09	9,262	-52	12 AP		1 hit	Formidable
09:10	9,277	66	23 AP	rapid	2 hits	Formidable
09:11	9,422	207	16 AP	rapid	1 hit	Formidable
09:12	9,514	331	13 AP			Formidable
09:13	9,900	434	15 AP		2 hits	Formidable
09:14	10,371	512	9 AP			Formidable
09:15	10,906	566	9 AP		2 hits	Formidable
09:16	11,496	614	6 AP		1 hit	Formidable
09:17	12,126	241	13 AP	rapid		Formidable
09:18	12,326	-143	11 AP		1 hit	Bulwark
09:19	11,799	178	22 AP	rapid		Bulwark
09:20	12,029	259	9 AP			Bulwark
09:21	12,340	345	8 AP			Bulwark
09:22	12,732	420	7 AP			Bulwark
09:23	13,169	398	7 AP			Bulwark
09:24	13,609	495	5 AP			Bulwark
09:25	14,131	563	7 AP			Bulwark
09:26	14,716	611	7 AP			Bulwark
09:27	15,253	-432	3 AP			Bulwark
09:28	14,927	-296	5 AP			Bulwark
09:29	14,634	-269	5 AP		1 hit	Bulwark
09:30	14,423	-182	13 AP	rapid		Bulwark
09:31	14,377	-157	5 AP			Bulwark
09:32	14,074	-91	6 AP			Bulwark
09:33	14,011	-25	8 AP			Bulwark
09:34	13,969	28	7 AP			Bulwark
09:35	14,017	96	6 AP			Bulwark
09:36	14,127	154	5 AP		1 hit	Bulwark
09:37	14,139	240	12 AP	rapid		Bulwark
09:38	14,414	308	5 AP			Bulwark
09:39	14,754	374	3 AP			Bulwark
09:40	15,627	885	2 AP			Bulwark
09:41	15,648	298	2 AP			Bulwark
09:43	15,212	-570	5 AP			Bulwark
09:44	14,553	-624	5 AP			Bulwark
09:45	13,867	-560	8 AP			Bulwark
09:46	13,313	-520	9 AP		1 hit	Bulwark
09:47	12,817	-457	18 AP	rapid		Bulwark
09:48	12,388	-392	17 AP	rapid		Bulwark
09:49	12,031	-325	13 AP		1 hit	Bulwark
09:50	11,754	-238	15 AP	rapid	1 hit	Bulwark
09:51	11,562	-150	17 AP	rapid		Bulwark
09:52	11,468	-9	13 AP		2 hits	Bulwark
09:53	11,510	81	20 AP	rapid	2 hits	Bulwark
09:54	11,643	171	21 AP	rapid	2 hits	Bulwark
09:55	11,865	259	12 AP			Bulwark
09:56	12,158	332	13 AP		1 hit	Bulwark
09:57	12,518	212	21 AP	rapid	1 hit	Bulwark
09:58	12,767	277	23 AP	rapid		Bulwark
09:59	13,083	341	10 AP			Bulwark
10:00	13,116	387	11 AP			London
10:01	13,528	433	8 AP			London
10:02	14,027	566	7 AP			London
10:03	14,641	631	7 AP			London
10:04	15,300	673	6 AP			London
10:05	15,998	714	4 AP			London
10:06	16,732	752	2 AP			London
10:08	16,930	-495	1 AP			London
10:09	16,424	-478	3 AP			London
10:10	15,940	-466	4 AP			London

10:11	15,496	-412	5	AP		London
10:12	14,863	163	8	AP		London
10:13	14,945	127	10	AP		London
10:14	15,091	163	11	AP		London
10:15	15,299	219	10	AP		London
10:16	15,572	287	9	AP		London
10:17	15,981	-55	1	SAP		London
10:18	15,913	-90	3	SAP		London
10:19	15,864	-43	1	SAP		London
10:20	15,831	-24	3	SAP		London
10:21	15,815	-6	5	SAP		London
10:22	15,692	-158	1	SAP		London
10:23	15,503	-289	1	SAP		London
10:24	15,193	-373	1	SAP		London
10:25	14,821	-421	2	SAP		London
10:26	14,387	-205	1	SAP		London
10:27	14,126	-259	4	SAP		London
10:28	13,870	-253	3	SAP		London
10:29	13,623	-241	4	SAP		London
10:30	13,385	-235	4	SAP		London
10:31	13,157	-222	3	SAP		London
10:32	12,878	-279	2	SAP		London
10:33	12,632	-284	2	SAP		London
10:34	12,341	-288	2	SAP		London
10:35	12,053	-288	2	SAP	1 hit	London
10:36	11,766	-287	6	SAP	rapid	London
10:37	11,478	-287	3	SAP		London
10:40	10,955	-97	3	SAP		London
10:47	10,021	59	6	SAP		London
10:48	10,128	92	8	SAP		London
10:49	10,202	83	7	AP		London
10:51	11,604	702	9	AP		London
10:52	12,551	986	3	SAP		London
10:53	13,504	986	5	SAP		London
10:54	14,522	1,018	4	SAP		London
10:55	15,540	1,018	2	SAP		London
10:56	15,828	290	1	AP	1 hit	London
11:00	16,664	665	3	SAP		London
11:01	17,373	721	2	SAP		London
28cm/50 Primary Total				775 shells	26 hits	3.4%

Hochseeflotte, Moltke, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:46	15,046	-1,421	3 HE		Aurora
08:47	13,976	-1,131	1 HE		Aurora
08:49	11,952	-948	3 HE		Aurora
08:50	11,049	-860	7 HE		Aurora
08:51	10,235	-757	9 HE		Aurora
08:52	9,552	-610	9 HE		Aurora
08:53	9,030	-432	10 HE		Aurora
08:54	8,698	-221	11 HE		Aurora
08:55	8,588	4	10 HE		Aurora
08:56	8,708	225	13 HE		Aurora
08:57	9,050	441	11 HE		Aurora
08:58	9,591	623	8 HE		Aurora
08:59	10,298	773	8 HE		Aurora
09:00	11,168	939	9 HE		Aurora
09:01	11,239	-513	7 HE		Arethusa
09:02	11,106	-110	2 HE		Arethusa
09:03	10,996	-94	3 HE		Arethusa
09:04	10,944	-41	3 HE		Arethusa
09:05	10,931	-3	2 HE		Arethusa
09:06	10,938	13	3 HE		Arethusa
09:07	10,683	164	1 HE		Arethusa
09:08	9,924	-717	3 HE		Arethusa
09:09	9,355	-514	3 HE		Arethusa
09:10	12,809	-22	1 HE		1st Flot
09:11	12,834	105	1 HE		1st Flot
09:12	12,760	251	2 HE		1st Flot
09:13	13,070	398	1 HE	1 hit	1st Flot
09:15	8,976	587	6 HE		Arethusa
09:16	10,303	1,329	3 HE		Arethusa
09:17	11,454	671	1 HE		Arethusa
09:18	10,628	919	3 HE		Undaunted
09:19	11,444	761	2 HE		Undaunted
09:20	11,169	754	1 HE		Aurora
09:21	12,080	908	1 HE		Aurora
09:23	11,920	24	2 HE		Aurora
09:24	11,896	-6	1 HE		Aurora
09:26	11,928	32	1 HE		Aurora
09:27	11,925	-148	1 HE		Aurora
09:28	11,789	-112	1 HE		Aurora
09:29	10,945	-277	2 HE		Arethusa
09:30	10,744	-128	2 HE		Arethusa
09:31	10,683	1	2 HE		Arethusa
09:32	10,732	119	2 HE		Arethusa
09:33	10,888	222	1 HE		Arethusa
09:34	11,167	343	1 HE		Arethusa
09:35	11,561	440	2 HE		Arethusa
09:36	11,321	-320	1 HE		Aurora
09:37	11,119	430	2 HE		Aurora
09:38	11,587	602	2 HE		Aurora
09:39	12,244	556	1 HE		Aurora
09:40	12,850	580	1 HE		Aurora
09:41	13,461	591	1 HE		Aurora
09:43	13,332	-689	1 HE		Aurora
09:44	11,224	-514	5 HE		Undaunted
09:45	10,733	-212	7 HE		Undaunted
09:46	10,552	-100	9 HE		Undaunted
09:47	10,798	11	9 HE		Arethusa
09:48	10,866	118	7 HE		Arethusa
09:49	11,031	207	8 HE		Arethusa
09:50	11,286	294	8 HE		Arethusa
09:51	11,190	311	7 HE		Undaunted
09:52	11,546	445	5 HE		Undaunted
09:53	12,019	508	2 HE		Undaunted
09:54	12,560	570	1 HE		Undaunted
09:55	13,159	628	2 HE		Undaunted
09:56	13,810	670	1 HE		Undaunted
09:57	14,473	527	2 HE		Undaunted
10:15	13,265	-1,162	3 HE		10th Flot
10:16	12,411	-576	2 HE		10th Flot

10:17	12,178	-549	1 HE		10th Flot
10:18	12,061	-570	1 HE		10th Flot
10:19	11,727	-504	1 HE		10th Flot
10:20	11,412	-433	2 HE		10th Flot
10:21	11,167	-243	1 HE		10th Flot
10:23	10,800	-154	2 HE		10th Flot
10:24	10,174	-392	2 HE		10th Flot
10:25	9,751	-419	2 HE		10th Flot
10:26	9,210	-375	2 HE		10th Flot
10:27	9,000	-210	3 HE		10th Flot
10:28	8,834	-165	1 HE		10th Flot
10:29	8,917	-375	2 HE		10th Flot
10:30	7,945	-1,489	7 HE		11th Flot
10:31	6,463	-1,474	11 HE		11th Flot
10:32	5,885	-569	4 HE		11th Flot
10:33	5,530	-387	6 HE		11th Flot
10:34	5,265	-462	7 HE		11th Flot
10:35	4,917	-346	8 HE		11th Flot
10:36	4,681	-232	21 HE		11th Flot
10:37	4,517	-160	21 HE	1 hit	11th Flot
10:38	4,425	-89	20 HE		11th Flot
10:39	4,255	-192	9 HE		11th Flot
10:40	6,791	-372	5 HE	1 hit	10th Flot
10:41	5,827	-1,492	5 HE		2nd Flot
10:42	5,472	-592	7 HE	1 hit	2nd Flot
10:43	5,075	-397	7 HE		2nd Flot
10:44	5,125	-500	7 HE		2nd Flot
10:45	5,052	-399	7 HE		2nd Flot
10:46	5,017	-298	6 HE		2nd Flot
10:47	5,147	-24	14 HE		2nd Flot
10:48	5,259	101	19 AP		2nd Flot
10:49	5,424	183	15 AP	2 hits	2nd Flot
10:51	6,801	717	10 AP	1 hit	2nd Flot
10:52	7,749	983	2 AP		2nd Flot
10:53	8,700	984	2 AP		2nd Flot
10:54	9,716	1,016	1 AP		2nd Flot
10:55	10,733	1,016	1 AP		2nd Flot
10:56	11,036	313	1 AP		2nd Flot
10:57	11,238	-225	1 AP		2nd Flot
10:58	11,081	-164	3 AP		2nd Flot
10:59	11,541	307	1 AP		2nd Flot
11:00	11,715	478	1 AP		10th Flot
11:01	12,293	604	3 AP		10th Flot
11:02	13,185	1,013	3 AP		10th Flot
15cm/45 Secondary Total 521 shells 7 hits 1.3%					

Hochseeflotte, Von der Tann

Local Time	Range Yards	Range Rate	Shells Fired		Result	Target
09:00	16,304	-1,020	1 SAP			Queen
09:02	15,898	-866	1 SAP			Prince of Wales
09:03	15,048	-827	3 SAP			Prince of Wales
09:04	14,130	-906	1 SAP			Prince of Wales
09:05	13,233	-885	2 SAP			Prince of Wales
09:06	11,214	-951	2 AP			Irresistible
09:07	10,270	-934	3 AP			Irresistible
09:08	9,555	-248	4 AP			Irresistible
09:09	9,356	-162	10 AP			Irresistible
09:10	9,270	-35	12 AP		1 hit	Irresistible
09:11	9,310	84	14 AP	rapid	1 hit	Irresistible
09:12	9,100	261	13 AP			Irresistible
09:13	9,419	366	11 AP			Irresistible
09:14	9,837	465	7 AP			Irresistible
09:15	10,330	523	7 AP		2 hits	Irresistible
09:16	10,884	588	5 AP			Irresistible
09:17	11,493	711	2 AP			Irresistible
09:18	12,180	600	3 AP			Irresistible
09:20	12,018	537	2 AP			London
09:21	12,537	-57	4 AP			London
09:22	12,153	-377	1 AP			London
09:23	12,406	297	1 AP			London
09:24	12,742	289	11 AP			London
09:25	13,092	394	10 AP		1 hit	London
09:26	13,543	500	6 AP			London
09:27	13,875	350	6 AP		1 hit	London
09:28	14,706	-36	1 AP	rapid		London
09:29	14,719	40	4 AP			London
09:30	14,419	-261	5 AP			London
09:31	14,177	-203	6 AP			London
09:32	13,758	-193	7 AP		1 hit	London
09:33	13,639	-77	21 AP	rapid		London
09:34	13,562	9	7 AP			London
09:35	13,590	95	8 AP			London
09:36	13,719	196	5 AP			London
09:37	13,597	189	5 AP			London
09:38	13,826	257	4 AP			London
09:39	14,123	325	4 AP			London
09:40	14,959	851	4 AP			London
09:41	15,355	248	2 AP			London
09:44	15,392	-638	3 AP			London
09:45	14,257	-571	5 AP			London
09:46	13,648	-539	6 AP			London
09:47	13,092	-501	7 AP			London
09:48	12,596	-457	7 AP			London
09:49	12,166	-392	7 AP			London
09:50	11,811	-307	9 AP		1 hit	London
09:51	11,537	-238	14 AP	rapid	1 hit	London
09:52	11,349	-150	17 AP	rapid	1 hit	London
09:53	11,271	9	10 AP		1 hit	London
09:54	11,321	99	17 AP	rapid		London
09:55	11,464	188	17 AP	rapid		London
09:56	11,686	265	10 AP		2 hits	London
09:57	11,987	422	17 AP	rapid	1 hit	London
09:58	12,376	334	18 AP	rapid		London
09:59	12,716	277	7 AP		1 hit	London
10:00	12,714	325	10 AP			Venerable
10:01	13,067	387	9 AP			Venerable
10:02	13,504	472	8 AP			Venerable
10:03	14,041	592	7 AP		1 hit	Venerable
10:04	14,660	645	5 AP		1 hit	Venerable
10:05	15,321	687	5 AP			Venerable
10:06	16,023	727	3 AP			Venerable
10:07	16,127	134	3 AP			Venerable
10:08	16,135	-554	1 AP			Venerable
10:09	15,611	-485	4 AP			Venerable
10:10	15,101	-473	5 AP		1 hit	Venerable
10:11	14,635	-438	14 AP	rapid		Venerable
10:12	14,381	138	6 SAP			Venerable

10:13	14,440	72	6 SAP		Venerable
10:14	14,564	139	7 SAP		Venerable
10:15	14,752	207	7 AP		Venerable
10:16	15,005	275	7 AP		Venerable
10:17	15,235	482	6 AP	1 hit	Venerable
10:18	15,773	-90	2 SAP	rapid	Venerable
10:19	15,718	-18	3 SAP		Venerable
10:20	15,682	-24	3 SAP		Venerable
10:22	15,567	-171	1 SAP		Venerable
10:23	15,365	-231	1 SAP		Venerable
10:24	15,109	-305	2 SAP		Venerable
10:25	14,805	-324	2 SAP		Venerable
10:26	14,459	-220	1 SAP		Venerable
10:27	14,049	-271	2 SAP		Venerable
10:28	13,780	-265	1 SAP		Venerable
10:29	13,519	-253	4 SAP		Venerable
10:30	13,268	-247	4 SAP		Venerable
10:31	13,025	-235	4 SAP		Venerable
10:32	12,743	-278	2 SAP		Venerable
10:33	12,498	-280	2 SAP		Venerable
10:34	12,218	-280	2 SAP		Venerable
10:35	11,935	-289	2 SAP		Venerable
10:36	11,645	-289	3 SAP		Venerable
10:40	10,968	-20	1 SAP		Venerable
10:47	10,036	65	1 SAP		Venerable
10:48	10,147	92	6 SAP		Venerable
10:49	10,225	83	5 SAP		Venerable
10:51	11,716	742	5 SAP		Venerable
10:52	12,482	771	4 SAP		Venerable
10:53	13,536	1,017	2 SAP		Venerable
10:54	14,553	1,018	2 SAP		Venerable
10:55	15,571	1,018	1 SAP		Venerable
10:56	16,589	1,018	1 SAP		Venerable
28cm/45 Primary Total			578 shells	19 hits	3.3%

Hochseeflotte, Von der Tann, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:46	15,458	-1,426	2 HE		Aurora
08:47	14,385	-1,035	1 HE		Aurora
08:49	12,417	-964	2 HE		Aurora
08:50	11,496	-878	6 HE		Aurora
08:51	10,657	-777	8 HE		Aurora
08:52	9,939	-653	9 HE		Aurora
08:53	9,372	-477	10 HE		Aurora
08:54	8,982	-292	10 HE		Aurora
08:55	12,767	-247	4 HE		Undaunted
08:56	12,589	-155	5 HE		Undaunted
08:57	12,511	-38	4 HE		Undaunted
08:58	12,503	215	6 HE		Undaunted
08:59	12,768	45	6 HE		Undaunted
09:00	12,730	-510	6 HE		Undaunted
09:01	12,223	-893	6 HE		Undaunted
09:02	11,548	-658	1 HE		Undaunted
09:03	10,913	-846	1 HE		Undaunted
09:04	10,603	-297	8 HE		Undaunted
09:05	10,370	-217	8 HE		Undaunted
09:06	10,165	-1,310	1 HE		Undaunted
09:07	8,856	-179	1 HE		Undaunted
09:08	8,882	459	1 HE		Undaunted
09:09	9,432	666	3 HE		Undaunted
09:10	10,125	759	2 HE		Undaunted
09:11	9,910	-121	2 HE		Undaunted
09:12	8,781	-497	10 HE		Undaunted
09:13	8,431	-251	9 HE		Undaunted
09:14	8,328	19	7 HE		Undaunted
09:15	8,471	251	9 HE		Undaunted
09:16	8,835	463	7 HE		Undaunted
09:18	10,615	1,330	1 HE		Undaunted
09:19	11,370	1,012	1 HE		Undaunted
09:24	12,966	-560	2 HE		Undaunted
09:25	11,524	-490	7 HE		Arethusa
09:26	11,090	-384	5 HE		Arethusa
09:27	10,815	-239	3 HE		Arethusa
09:28	10,658	-113	3 HE		Arethusa
09:29	10,585	-24	2 HE		Arethusa
09:30	10,251	-256	2 HE		Arethusa
09:31	10,069	-112	3 HE		Arethusa
09:32	10,383	-76	3 HE		Undaunted
09:33	10,424	104	3 HE		Undaunted
09:34	10,620	279	3 HE		Undaunted
09:35	10,954	402	2 HE		Undaunted
09:36	10,862	-216	2 HE		Aurora
09:37	10,633	412	2 HE		Aurora
09:38	11,093	586	2 HE		Aurora
09:39	11,745	556	1 HE		Aurora
09:40	12,350	580	1 HE		Aurora
09:41	12,963	591	1 HE		Aurora
09:44	11,816	-529	5 HE		Undaunted
09:45	10,931	-237	7 HE		Undaunted
09:46	10,707	-113	8 HE		Undaunted
09:47	10,576	-76	3 HE		Undaunted
09:48	10,728	-25	7 HE		Undaunted
09:49	10,753	65	7 HE		Undaunted
09:50	10,875	172	7 HE		Undaunted
09:51	11,091	259	6 HE		Undaunted
09:52	11,397	345	7 HE		Undaunted
09:53	11,801	477	2 HE		Undaunted
09:54	12,309	539	1 HE		Undaunted
09:55	12,880	599	2 HE		Undaunted
09:56	13,506	657	1 HE		Undaunted
09:57	14,179	703	2 HE		Undaunted
09:58	14,863	587	1 HE		Undaunted
10:15	13,471	-1,151	2 HE		10th Flot
10:16	12,606	-607	2 HE		10th Flot
10:17	12,218	-174	2 HE		10th Flot
10:19	12,214	-476	1 HE		10th Flot

10:21	11,649	-246	1 HE		10th Flot
10:23	11,292	-154	1 HE		10th Flot
10:24	10,660	-392	1 HE		10th Flot
10:25	10,235	-422	1 HE		10th Flot
10:26	9,684	-379	1 HE		10th Flot
10:29	9,806	-1,467	1 HE		11th Flot
10:30	8,307	-1,497	6 HE		11th Flot
10:31	6,813	-1,489	9 HE		11th Flot
10:32	6,244	-580	2 HE	1 hit	11th Flot
10:33	5,895	-378	3 HE		11th Flot
10:34	5,649	-455	17 HE	1 hit	11th Flot
10:35	8,926	-182	10 HE		1st Flot
10:36	5,082	-223	16 HE	1 hit	11th Flot
10:37	8,409	-206	9 HE		1st Flot
10:38	8,440	-277	10 HE		1st Flot
10:40	7,840	-1,211	10 HE		2nd Flot
10:41	6,969	-264	6 AP		10th Flot
10:42	6,559	-250	12 AP		10th Flot
10:43	6,325	-256	13 AP	1 hit	10th Flot
10:44	6,112	-234	14 AP	1 hit	10th Flot
10:45	6,101	0	9 AP		10th Flot
10:46	6,149	61	12 AP		10th Flot
10:47	6,774	647	7 AP		10th Flot
10:48	6,782	14	9 AP		10th Flot
10:49	6,723	289	10 AP		10th Flot
10:51	8,099	772	6 AP		10th Flot
10:52	8,903	805	4 AP		10th Flot
11:01	14,020	-144	2 AP		2nd Flot
11:02	13,846	153	1 AP		10th Flot
11:03	13,926	248	2 AP		2nd Flot
15cm/45 Secondary Total			482 shells	5 hits	1%

Hochseeflotte, Blucher

Local Time	Range Yards	Range Rate	Shells Fired		Result	Target
09:00	16,804	-1,014	1 SAP			Queen
09:01	15,790	-1,009	1 SAP			Queen
09:02	14,841	-936	2 SAP			Queen
09:03	13,919	-913	4 SAP			Queen
09:04	12,947	-967	2 SAP			Queen
09:05	11,991	-943	3 SAP			Queen
09:06	12,055	-975	3 SAP			Implacable
09:07	11,092	-951	2 SAP			Implacable
09:08	10,150	-934	5 SAP			Implacable
09:09	9,540	-230	4 SAP			Implacable
09:10	9,355	-146	13 SAP			Implacable
09:11	9,268	-35	10 SAP			Implacable
09:12	9,300	84	23 SAP	rapid	2 hits	Implacable
09:13	9,238	2	30 SAP	rapid	1 hit	Implacable
09:14	9,325	150	16 SAP		2 hits	Implacable
09:15	9,782	478	20 SAP	rapid	1 hit	Implacable
09:16	10,295	547	25 SAP	rapid	1 hit	Implacable
09:17	10,870	697	1 SAP			Implacable
09:18	10,713	610	3 SAP			Venerable
09:19	11,629	117	2 SAP			Venerable
09:20	11,675	79	9 SAP			Venerable
09:21	11,816	184	11 SAP		1 hit	Venerable
09:22	12,050	279	29 AP	rapid	2 hits	Venerable
09:23	12,571	385	2 AP			London
09:24	12,993	390	1 AP			London
09:25	13,245	426	10 AP			Venerable
09:26	13,709	495	8 AP			Venerable
09:27	14,135	473	7 AP			Venerable
09:28	14,687	578	6 AP			Venerable
09:30	15,018	-296	5 AP			Venerable
09:31	14,752	-231	6 AP			Venerable
09:32	14,337	-403	1 AP			Venerable
09:33	13,964	-157	8 AP			Venerable
09:34	13,778	-91	6 AP			Venerable
09:35	13,685	-41	5 AP			Venerable
09:36	13,679	28	4 AP			Venerable
09:37	13,436	-171	6 AP			Venerable
09:38	13,268	223	6 AP		1 hit	Venerable
09:39	13,520	291	15 AP	rapid	1 hit	Venerable
09:40	14,316	818	7 AP			Venerable
09:41	15,099	754	4 AP			Venerable
09:42	15,185	338	1 AP			Venerable
09:43	15,435	250	2 AP			Venerable
09:44	15,586	-516	1 AP			Venerable
09:45	14,944	-632	4 AP			Venerable
09:46	14,041	-616	7 AP			Venerable
09:47	13,430	-581	8 AP			Venerable
09:48	12,872	-536	9 AP			Venerable
09:49	12,374	-457	10 AP		1 hit	Venerable
09:50	11,945	-392	23 AP	rapid	3 hits	Venerable
09:51	11,591	-307	27 AP	rapid	2 hits	Venerable
09:52	11,320	-221	11 AP			Venerable
09:53	11,137	-132	11 AP		1 hit	Venerable
09:54	11,074	9	22 AP	rapid		Venerable
09:55	11,133	99	24 AP	rapid	1 hit	Venerable
09:56	11,277	180	11 AP			Venerable
09:57	11,507	376	10 AP			Venerable
09:58	11,922	483	11 AP		1 hit	Venerable
09:59	12,321	342	22 AP	rapid		Venerable
10:01	15,570	578	6 AP			Formidable
10:02	16,145	597	4 AP			Formidable
10:03	16,736	613	1 AP			Formidable
10:11	15,854	-420	1 AP			Bulwark
10:12	15,407	125	1 AP			Bulwark
10:13	15,454	60	1 AP			Bulwark
10:14	15,562	127	5 AP			Bulwark
10:15	15,733	182	5 AP			Bulwark
10:16	15,967	251	5 AP			Bulwark
10:17	16,174	469	3 AP			Bulwark

10:18	16,625	596	3 AP			Bulwark
10:22	17,034	21	1 AP			Bulwark
10:23	16,439	-302	1 AP			Bulwark
10:24	16,226	-267	2 AP			Bulwark
10:25	15,996	-224	2 AP			Bulwark
10:26	15,656	-247	2 AP			Bulwark
10:27	15,328	-271	3 AP			Bulwark
10:28	15,061	-265	3 AP			Bulwark
10:29	14,802	-253	4 AP			Bulwark
10:30	14,551	-247	3 AP			Bulwark
10:31	14,309	-241	3 AP			Bulwark
10:32	14,686	-289	1 SAP			Irresistible
10:33	14,430	-289	1 SAP			Irresistible
10:34	14,140	-289	3 SAP			Irresistible
10:35	13,852	-289	5 SAP			Irresistible
10:36	13,563	-289	4 SAP			Irresistible
10:37	13,274	-289	4 SAP			Irresistible
10:38	12,985	-289	5 SAP			Irresistible
10:39	12,807	-172	3 AP			Irresistible
10:40	12,673	-146	5 AP			Irresistible
10:41	12,388	-284	1 AP			Irresistible
10:42	12,280	-76	7 AP	1 hit		Irresistible
10:43	12,620	-177	3 AP	rapid		Irresistible
10:44	12,442	-111	2 AP			Irresistible
10:45	12,298	-109	2 AP			Irresistible
10:46	12,155	-143	1 AP			Irresistible
10:47	12,206	53	6 SAP			Irresistible
10:48	12,309	87	9 SAP			Irresistible
10:49	12,376	71	8 SAP			Irresistible
10:50	13,039	669	5 SAP			Irresistible
10:51	13,688	669	8 SAP	1 hit		Irresistible
10:52	14,373	689	6 SAP			Irresistible
10:53	15,083	717	7 SAP			Irresistible
21cm/45 Primary Total			695 shells	23 hits	3.3%	

Hochseeflotte, Blucher, Secondary

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:47	14,782	-1,054	1 HE		Aurora
08:48	13,825	-919	4 HE		Aurora
08:49	12,884	-980	2 HE		Aurora
08:50	11,948	-896	5 HE		Aurora
08:51	11,085	-816	6 HE		Aurora
08:55	13,234	-247	4 HE		Undaunted
08:56	13,042	-170	5 HE		Undaunted
08:57	12,947	-55	4 HE		Undaunted
08:58	12,920	203	4 HE		Undaunted
08:59	13,170	50	5 HE		Undaunted
09:00	13,136	-504	3 HE		Undaunted
09:01	12,636	-884	4 HE		Undaunted
09:04	11,058	-288	5 HE		Undaunted
09:05	10,835	-208	5 HE		Undaunted
09:10	12,733	-148	1 HE		1st Flot
09:11	12,635	-31	2 HE		1st Flot
09:12	7,972	-245	9 HE		Arethusa
09:13	7,622	-237	8 HE		Arethusa
09:14	7,528	63	8 HE		Arethusa
09:15	7,981	565	8 HE		Arethusa
09:16	9,306	1,329	4 HE		Arethusa
09:18	10,583	-1,180	2 HE		Aurora
09:19	9,565	-252	1 HE		Aurora
09:20	10,227	654	6 HE		Aurora
09:25	11,799	-421	5 HE		Arethusa
09:26	11,431	-310	5 HE		Arethusa
09:27	11,189	-189	5 HE		Arethusa
09:28	11,085	-56	2 HE		Arethusa
09:29	11,031	-111	2 HE		Aurora
09:30	10,923	-107	2 HE		Aurora
09:31	10,795	-124	6 HE		Aurora
09:32	10,706	53	2 HE		Aurora
09:33	10,783	141	2 HE		Aurora
09:35	10,954	263	2 HE		Undaunted
09:36	11,316	478	1 HE		Arethusa
09:37	10,993	-269	4 HE		Arethusa
09:38	10,863	-124	1 HE		Arethusa
09:39	10,784	-103	2 HE		Arethusa
09:40	10,693	-79	2 HE		Arethusa
09:41	10,620	-63	2 HE		Arethusa
09:44	11,595	-78	1 HE		Arethusa
09:45	11,537	-261	4 HE		Arethusa
09:46	10,883	-175	6 HE		Undaunted
09:47	10,704	-122	6 HE		Undaunted
09:48	10,879	29	6 HE		Arethusa
09:49	10,950	118	5 HE		Arethusa
09:50	11,116	207	6 HE		Arethusa
09:51	11,051	235	2 HE		Aurora
09:52	11,401	434	5 HE		Aurora
09:53	11,871	600	2 HE		Aurora
09:54	12,353	692	2 HE		Aurora
09:55	12,923	725	1 HE		Aurora
09:56	13,546	732	1 HE		Aurora
09:57	14,266	757	1 HE		Aurora
10:15	13,692	-1,138	1 HE		10th Flot
10:16	12,818	-626	2 HE		10th Flot
10:17	12,411	-197	1 HE		10th Flot
10:18	12,619	-55	4 HE		10th Flot
10:32	9,286	-285	4 HE		10th Flot
10:33	9,320	18	5 HE		10th Flot
10:34	6,050	-447	11 HE		11th Flot
10:35	5,716	-332	10 HE	1 hit	11th Flot
10:36	9,085	-310	7 HE		1st Flot
10:37	8,879	-206	7 HE		1st Flot
10:38	8,904	-274	7 HE		1st Flot
10:41	8,247	-284	6 HE		1st Flot
10:42	7,892	-312	7 HE		1st Flot
10:43	7,853	-232	6 HE		1st Flot
10:44	6,525	-180	10 HE		10th Flot

10:45	6,495	12	7 HE	10th Flot
10:46	6,523	40	10 HE	10th Flot
10:47	7,486	182	7 HE	1st Flot
10:48	7,692	198	8 HE	1st Flot
10:49	7,080	279	8 HE	10th Flot
10:50	7,631	554	3 HE	10th Flot
10:51	8,432	757	6 AP	10th Flot
10:52	9,216	785	4 AP	10th Flot
10:53	10,029	812	4 AP	10th Flot
10:54	10,883	878	1 AP	10th Flot
10:55	11,496	621	1 AP	10th Flot
10:57	12,450	308	1 AP	10th Flot
10:58	12,632	561	3 AP	2nd Flot
15cm/45 Secondary Total 350 shells				1 hit 0.3%

Hochseeflotte, Strassburg

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:37	13,389	-1,459	1 HE		Aurora
08:38	11,959	-1,485	1 HE		Aurora
08:39	10,541	-1,471	2 HE		Aurora
08:40	9,140	-1,445	1 HE		Aurora
08:41	7,765	-1,416	13 HE		Aurora
08:42	6,391	-1,418	15 HE		Aurora
08:43	5,006	-1,420	21 HE		Aurora
08:44	3,668	-1,336	27 HE	3 hits	Aurora
08:45	2,455	-1,110	83 HE	rapid 4 hits	Aurora
08:46	1,666	-325	86 HE	rapid 9 hits	Aurora
08:47	5,416	-1,246	15 HE		Arethusa
08:48	4,224	-1,101	24 HE	1 hit	Arethusa
08:49	3,250	-732	31 HE	3 hits	Arethusa
08:50	2,861	4	76 HE	rapid 1 hit	Arethusa
08:51	3,273	763	27 HE	1 hit	Arethusa
08:52	4,899	1,638	2 HE		Arethusa
08:53	6,235	1,347	2 HE		Arethusa
08:54	7,721	1,493	1 HE		Arethusa
08:55	9,284	1,567	1 HE		Arethusa
08:56	10,889	1,609	1 HE		Arethusa
08:58	11,378	-722	1 HE		Arethusa
08:59	10,281	-1,079	1 HE		Arethusa
09:00	9,164	-1,088	1 HE		Arethusa
09:01	7,993	-1,129	2 HE		Arethusa
09:02	7,177	-717	2 HE		Arethusa
09:03	6,518	-520	13 HE		Arethusa
09:04	6,138	-227	13 HE		Arethusa
09:05	6,105	143	16 HE		Arethusa
09:06	7,299	1,266	1 HE		Arethusa
09:07	8,087	858	2 HE		Arethusa
09:08	8,061	-1	1 HE		Arethusa
09:09	8,250	202	2 HE		Arethusa
09:10	8,455	221	2 HE		Arethusa
09:11	8,646	211	1 HE		Arethusa
09:12	8,874	249	1 HE		Arethusa
09:14	9,275	-278	1 HE		Arethusa
09:15	9,013	-146	10 HE		Arethusa
09:16	10,076	1,104	1 HE		Arethusa
09:17	10,527	484	1 HE		Arethusa
09:18	11,115	619	1 HE		Arethusa
09:21	12,619	130	1 HE		Arethusa
09:23	11,382	-563	1 HE		Arethusa
09:24	10,866	-470	1 HE		Arethusa
09:25	10,429	-384	1 HE		Arethusa
09:26	10,117	-242	1 HE		Arethusa
09:27	9,482	-556	2 HE		Arethusa
09:28	9,066	-330	9 HE		Arethusa
09:29	8,845	-113	10 HE	1 hit	Arethusa
09:30	8,832	101	31 HE	rapid	Arethusa
09:31	9,028	290	8 HE		Arethusa
09:32	9,382	436	8 HE		Arethusa
09:33	9,879	566	8 HE		Arethusa
09:34	10,516	706	6 HE		Arethusa
09:37	12,364	274	1 HE		Arethusa
09:40	12,945	170	1 HE		Arethusa
09:43	12,571	-24	1 HE		Arethusa
09:45	12,670	150	1 HE		Arethusa
09:47	13,006	91	1 HE		Arethusa
09:49	13,428	322	1 HE		Arethusa
09:50	13,798	424	1 HE		Arethusa
10:18	12,586	-706	1 HE		10th Flot
10:19	12,141	-654	4 HE		10th Flot
10:20	11,723	-558	4 HE		10th Flot
10:21	11,316	-405	1 HE		10th Flot
10:22	10,875	-441	1 HE		10th Flot
10:23	10,501	-374	2 HE		10th Flot
10:25	9,235	-567	3 HE		10th Flot
10:26	8,645	-521	2 HE		10th Flot
10:27	13,502	-460	1 HE		1st Flot

10:28	12,052	-1,448	1 HE			1st Flot
10:29	10,607	-1,444	1 HE			1st Flot
10:30	9,152	-1,450	4 HE			1st Flot
10:31	8,529	-546	5 HE			1st Flot
10:32	7,996	-525	2 AP			1st Flot
10:33	7,487	-494	13 AP			1st Flot
10:34	7,053	-413	13 AP			1st Flot
10:35	6,758	-275	14 AP			1st Flot
10:36	6,405	-350	15 AP			1st Flot
10:37	2,923	-344	25 AP			11th Flot
10:38	2,752	-142	11 HE	2 hits		11th Flot
10:39	5,593	-334	15 HE			1st Flot
10:40	5,568	-354	13 AP			1st Flot
10:41	5,247	-340	19 AP			1st Flot
10:42	4,897	-341	21 AP	4 hits		1st Flot
10:43	4,614	-296	56 AP	rapid 2 hits		1st Flot
10:44	4,371	-257	62 AP	rapid 4 hits		1st Flot
10:45	4,165	-216	24 AP	3 hits		1st Flot
10:46	3,995	-182	66 AP	rapid 4 hits		1st Flot
10:47	4,600	614	16 AP	1 hit		1st Flot
10:48	5,170	576	18 AP	2 hits		1st Flot
10:49	5,784	619	15 AP			1st Flot
10:50	6,425	645	15 AP			1st Flot
10:51	7,073	652	13 AP	1 hit		1st Flot
10:52	4,980	689	14 AP			2nd Flot
10:53	5,867	888	16 HE			2nd Flot
10:54	9,528	856	1 HE			1st Flot
10:55	10,415	888	6 HE			1st Flot
10:56	11,302	888	6 HE			1st Flot
10:58	11,663	38	5 HE			1st Flot
10:59	11,772	167	5 HE			1st Flot
11:00	12,001	276	6 HE			1st Flot
11:01	12,352	406	6 HE			1st Flot
11:03	13,477	620	1 HE			1st Flot
11:05	13,229	568	1 HE			2nd Flot
10.5cm/45 Primary Total 1140 shells 46 hits 4%						

Hochseeflotte, Graudenz

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:42	12,714	-1,623	1 HE		Aurora
08:43	11,048	-1,645	2 HE		Aurora
08:44	9,444	-1,568	1 HE		Aurora
08:45	7,938	-1,442	11 HE		Aurora
08:46	6,600	-1,224	10 HE		Aurora
08:47	7,077	698	2 HE		Aurora
08:48	8,507	-1,147	2 HE		Arethusa
08:49	7,418	-971	2 HE		Arethusa
08:50	6,591	-660	11 HE		Arethusa
08:51	6,138	-984	2 HE		Arethusa
08:52	6,386	304	2 HE		Arethusa
08:53	11,449	907	2 HE		Aurora
08:56	9,373	-64	1 HE		Arethusa
08:57	9,190	546	1 HE		Arethusa
08:59	8,931	266	2 HE		Arethusa
09:00	9,150	225	2 HE		Arethusa
09:01	11,348	102	1 HE		Undaunted
09:03	10,884	-1,314	1 HE		Undaunted
09:04	9,837	-880	1 HE		Undaunted
09:05	8,686	-361	2 HE		Arethusa
09:06	8,402	-162	1 HE		Arethusa
09:07	8,698	410	1 HE		Arethusa
09:08	8,436	-233	2 HE		Arethusa
09:09	8,364	-33	2 HE		Arethusa
09:10	8,249	-781	1 HE		Arethusa
09:11	8,224	-68	2 HE		Arethusa
09:12	10,016	-828	1 HE		Undaunted
09:14	9,874	-22	2 HE		Undaunted
09:16	9,546	-586	2 HE		Undaunted
09:17	9,074	150	1 HE		Undaunted
09:18	8,135	-1,158	2 HE		Aurora
09:19	7,008	-1,080	2 HE		Aurora
09:20	6,971	131	2 HE		Aurora
09:21	7,398	579	2 HE		Aurora
09:22	7,171	-210	2 HE		Aurora
09:23	6,995	-37	2 HE		Aurora
09:24	6,928	-26	3 HE		Aurora
09:25	9,595	-594	1 HE		Arethusa
09:26	9,011	-520	2 HE		Arethusa
09:27	8,603	-443	1 HE		Arethusa
09:28	8,286	-287	2 HE		Arethusa
09:29	7,692	279	2 HE		Aurora
09:30	8,039	28	2 HE		Arethusa
09:31	8,096	116	1 HE		Aurora
09:32	8,272	265	11 HE		Aurora
09:33	8,609	399	12 HE		Aurora
09:34	9,026	439	7 HE		Aurora
09:35	9,466	452	9 HE		Aurora
09:36	9,384	-51	1 HE		Aurora
09:37	9,562	639	1 HE		Aurora
09:38	10,250	833	1 HE		Aurora
09:40	11,977	819	1 HE		Aurora
09:46	13,102	-162	1 HE		Aurora
09:47	13,067	-71	1 HE		Aurora
09:48	13,040	-14	1 HE		Aurora
09:50	13,088	187	5 HE		Aurora
09:52	13,776	454	1 HE		Undaunted
10:25	12,229	-481	1 HE		10th Flot
10:27	11,173	-463	2 HE		10th Flot
10:28	10,763	-410	1 HE		10th Flot
10:30	11,996	-1,409	1 HE		1st Flot
10:31	11,389	-536	1 HE		1st Flot
10:32	10,757	-648	1 HE		1st Flot
10:33	10,064	-698	2 HE		1st Flot
10:34	9,464	-601	3 HE		1st Flot
10:35	8,961	-504	3 HE		1st Flot
10:36	8,478	-483	1 HE		1st Flot
10:37	8,116	-275	2 HE		1st Flot
10:38	8,130	-391	11 HE		1st Flot

10:39	7,709	-421	5 HE			1st Flot
10:40	7,573	-510	4 HE			1st Flot
10:41	7,064	-516	4 HE			1st Flot
10:42	6,549	-451	12 HE			1st Flot
10:43	6,156	-367	15 HE			1st Flot
10:44	5,847	-332	17 HE			1st Flot
10:45	5,545	-324	15 HE			1st Flot
10:46	5,278	-289	19 HE		1 hit	1st Flot
10:47	5,044	-49	52 HE	rapid		1st Flot
10:48	4,990	62	56 HE	rapid	2 hits	1st Flot
10:49	5,072	181	16 HE			1st Flot
10:50	5,627	568	15 HE			1st Flot
10:51	6,221	592	15 HE			1st Flot
10:52	6,821	633	13 HE			1st Flot
10:53	7,458	655	10 AP			1st Flot
10:54	5,504	593	17 AP			2nd Flot
10:55	6,371	869	13 HE			2nd Flot
10:56	7,268	875	12 HE			2nd Flot
10:57	10,612	796	1 HE			1st Flot
10:58	11,351	736	3 HE			1st Flot
10:59	12,139	328	3 HE			1st Flot
11:00	12,466	-248	3 HE		1 hit	1st Flot
11:01	12,280	-513	2 HE			1st Flot
11:03	12,634	737	1 HE			1st Flot
11:07	13,413	585	1 HE			2nd Flot
10.5cm/45 Primary Total 505 shells 4 hits 0.8%						

Hochseeflotte, Kolberg

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:46	12,978	-1,018	1 HE		Aurora
08:47	11,329	-1,648	2 HE		Aurora
08:48	9,776	-1,519	1 HE		Aurora
08:49	8,191	-1,585	2 HE		Aurora
08:50	6,609	-1,578	2 HE		Aurora
08:51	5,004	-1,600	7 HE		Aurora
08:52	9,244	-1,422	2 HE		Arethusa
08:53	8,627	-1,602	1 HE		Undaunted
08:54	7,798	-697	2 HE		Undaunted
08:55	7,200	-414	14 HE		Undaunted
08:56	6,907	-152	14 HE		Undaunted
08:57	7,313	550	13 HE		Undaunted
08:58	8,487	489	1 HE		Arethusa
08:59	8,107	-354	1 HE		Arethusa
09:00	7,722	-332	2 HE		Arethusa
09:01	10,515	1,663	1 HE		Aurora
09:02	12,162	1,655	1 HE		Aurora
09:14	12,549	-1,089	1 HE		Aurora
09:15	11,477	-1,121	1 HE		Aurora
09:17	10,571	888	1 HE		Arethusa
09:18	9,266	610	1 HE		Undaunted
09:19	9,963	658	1 HE		Undaunted
09:22	12,393	-587	1 HE		Arethusa
09:25	3,838	33	5 HE		Aurora
09:26	3,946	147	8 HE		Aurora
09:27	4,116	206	8 HE		Aurora
09:28	4,378	292	10 HE		Aurora
09:29	8,141	-680	2 HE		Undaunted
09:30	7,479	-587	1 HE		Undaunted
09:31	6,953	-434	11 HE		Undaunted
09:32	6,638	-229	15 HE		Undaunted
09:33	5,931	123	17 HE	1 hit	Arethusa
09:34	6,570	199	14 HE	1 hit	Undaunted
09:35	6,858	394	12 HE		Undaunted
09:36	7,354	593	13 HE	1 hit	Undaunted
09:37	7,112	485	11 HE		Aurora
09:38	7,733	171	1 HE		Arethusa
09:39	7,945	187	1 HE		Arethusa
09:40	8,138	203	2 HE		Arethusa
09:41	8,345	219	1 HE		Arethusa
09:42	8,164	-73	1 HE		Arethusa
09:43	8,512	438	2 HE		Arethusa
09:44	9,015	586	1 HE		Arethusa
09:45	9,598	717	1 HE		Arethusa
09:46	10,669	482	1 HE		Aurora
09:48	11,828	486	1 HE		Aurora
09:51	13,166	268	1 HE		Aurora
10:53	13,755	321	1 HE		Aurora
10.5cm/45 Primary	Total		214 shells	3 hits	1.4%

Hochseeflotte, Stralsund

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
09:10	13,594	-1,273	1 HE		Arethusa
09:11	12,314	-1,225	1 HE		Arethusa
09:12	11,158	-1,083	1 HE		Arethusa
09:13	10,155	-913	1 HE		Arethusa
09:14	9,352	-699	2 HE		Arethusa
09:15	8,787	-379	1 HE		Arethusa
09:16	9,556	993	1 HE		Arethusa
09:17	9,049	-1,204	1 HE		Aurora
09:18	11,427	494	1 HE		Arethusa
09:21	12,538	-23	1 HE		Arethusa
09:23	11,109	-688	1 HE		Arethusa
09:24	10,466	-599	1 HE		Arethusa
09:25	9,880	-539	2 HE		Arethusa
09:26	9,412	-403	1 HE		Arethusa
09:27	9,119	-388	2 HE		Arethusa
09:28	8,858	-281	9 HE		Arethusa
09:29	8,508	-348	10 HE	1 hit	Arethusa
09:30	8,269	-147	40 HE	rapid	Arethusa
09:31	8,252	101	11 HE		Arethusa
09:32	8,431	285	11 HE		Arethusa
09:33	8,779	440	10 HE		Arethusa
09:34	9,300	607	7 HE		Arethusa
09:35	9,966	725	1 HE		Arethusa
09:36	9,942	-63	1 HE		Aurora
09:37	10,149	676	2 HE		Aurora
09:39	11,785	813	1 HE		Aurora
09:46	13,102	-183	1 HE		Aurora
09:49	13,013	-4	1 HE		Aurora
10:43	13,495	-432	2 HE		Undaunted
10:44	13,063	-398	2 HE		Undaunted
10:45	12,731	-365	2 HE		Undaunted
10:46	12,432	-332	2 HE		Undaunted
10:47	12,100	-266	4 HE		Undaunted
10:48	11,837	-175	1 HE		Undaunted
10:50	12,158	171	6 HE		Undaunted
10:51	12,350	206	5 HE		Undaunted
10:52	12,592	306	6 HE		Undaunted
10:53	12,901	341	5 HE		Undaunted
10:54	13,308	667	4 HE		Undaunted
10.5cm/45 Primary Total			162 shells	1 hit	0.6%

Hochseeflotte, Flot-I

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:55	8,705	-992	1 HE		Aurora
08:56	7,660	-766	2 HE		Aurora
08:57	6,894	-649	2 HE		Aurora
08:58	6,330	-403	13 HE	1 hit	Aurora
08:59	6,064	-70	15 SAP		Aurora
09:00	6,215	385	12 HE		Aurora
09:01	6,787	770	13 HE		Aurora
09:03	9,226	1,148	1 HE		Aurora
09:07	9,695	406	1 HE		Undaunted
09:11	8,591	-1,320	1 HE		Aurora
09:12	7,587	-831	1 HE		Aurora
09:13	7,253	-108	10 HE		Aurora
09:14	7,369	275	12 HE		Aurora
09:15	7,791	559	10 HE		Aurora
09:16	7,494	-213	2 HE		Aurora
09:17	7,692	233	2 HE		Aurora
09:18	7,961	310	1 HE		Aurora
09:19	8,365	439	1 HE		Aurora
10:05	7,831	814	1 HE		Undaunted
10:06	9,478	452	1 HE		2nd Flot
10:07	9,422	333	1 HE		Arethusa
10:08	9,292	-94	1 HE		Arethusa
10:09	9,197	-56	1 HE		Arethusa
10:11	9,094	35	1 HE		Arethusa
10:12	9,055	15	1 HE		Arethusa
10:14	9,206	-459	13 HE		1st Flot
10:15	9,666	-402	1 HE		2nd Flot
10:17	9,611	-391	1 HE		10th Flot
10:18	9,548	-288	1 HE		10th Flot
10:19	9,391	-142	1 HE		10th Flot
10:20	9,381	14	7 HE		10th Flot
10:21	9,587	275	1 HE		10th Flot
10:22	9,416	-116	1 HE		10th Flot
10:23	9,307	-69	1 HE		10th Flot
10:24	8,886	-167	1 HE		10th Flot
10:25	8,623	-177	1 HE		10th Flot
10:26	8,445	-109	2 HE		10th Flot
10:27	8,165	-247	1 HE		10th Flot
10:28	7,825	-317	2 HE		10th Flot
10:29	7,674	-412	1 HE		10th Flot
10:30	7,279	-153	16 HE		10th Flot
10:31	7,225	-98	1 HE		10th Flot
10:32	6,946	-278	2 HE		10th Flot
10:33	6,612	-324	21 HE		10th Flot
10:34	6,281	-322	23 HE		10th Flot
10:35	5,961	-301	18 HE	1 hit	10th Flot
10:36	5,438	-539	24 HE		10th Flot
10:37	4,934	-417	25 HE		10th Flot
10:38	5,166	232	15 HE		10th Flot
10:39	4,541	-395	3 HE		11th Flot
10:40	6,201	-655	1 HE		1st Flot
10:41	4,117	-510	31 HE	1 hit	10th Flot
10:42	3,411	-692	36 HE		10th Flot
10:43	3,664	326	9 HE		10th Flot
10:44	4,129	510	27 HE		10th Flot
10:45	4,485	-397	29 HE		2nd Flot
10:46	6,062	365	2 HE		1st Flot
10:47	5,427	888	1 HE		2nd Flot
10:48	6,309	927	2 HE		2nd Flot
10:50	8,230	994	2 HE		2nd Flot
10:51	8,839	904	1 HE		2nd Flot
8.8cm/30 Primary Total				431 shells	3 hits 0.7%

Hochseeflotte, Flot-II

Local Time	Range Yards	Range Rate	Shells Fired	Result	Target
08:56	8,557	-1,139	2 HE		Aurora
09:00	6,327	395	2 HE		Aurora
09:01	6,951	826	2 HE		Aurora
09:02	8,428	1,578	1 HE		Aurora
09:03	9,527	1,202	1 HE		Aurora
09:07	9,250	372	1 HE		Undaunted
09:12	7,822	-1,059	2 HE		Aurora
09:13	7,330	-207	1 HE		Aurora
09:14	7,299	174	12 HE		Aurora
09:15	7,635	463	13 HE		Aurora
09:16	7,271	-275	2 HE		Aurora
09:17	7,426	192	1 HE		Aurora
09:18	7,664	286	1 HE		Aurora
09:19	8,049	420	1 HE		Aurora
09:58	9,764	-843	1 HE		Undaunted
09:59	8,893	-866	1 HE		Undaunted
10:00	8,093	-826	1 HE		Undaunted
10:01	7,276	-808	11 HE		Undaunted
10:02	6,757	-790	12 HE		Undaunted
10:03	7,901	-1,398	1 HE		2nd Flot
10:05	7,034	795	1 HE		Undaunted
10:06	9,057	555	1 HE		2nd Flot
10:07	8,694	754	1 HE		Undaunted
10:09	8,535	0	2 HE		Arethusa
10:10	8,520	35	1 HE		Arethusa
10:11	8,527	54	2 HE		Arethusa
10:12	8,538	54	1 HE		Arethusa
10:13	8,696	215	1 HE		Arethusa
10:14	8,806	-449	18 HE		1st Flot
10:15	9,265	638	1 HE		1st Flot
10:16	9,504	343	16 HE		2nd Flot
10:18	8,966	-518	1 HE		10th Flot
10:19	8,429	-534	21 HE	1 hit	10th Flot
10:20	8,606	-41	19 HE		2nd Flot
10:21	8,601	29	19 HE		2nd Flot
10:22	7,749	-1,229	1 HE		11th Flot
10:23	7,932	285	1 HE		11th Flot
10:24	8,407	586	2 HE		11th Flot
10:25	9,323	-16	1 HE		1st Flot
10:27	9,879	-28	1 HE		11th Flot
10:28	6,643	424	2 HE		10th Flot
10:29	7,271	280	2 HE		10th Flot
10:30	7,559	346	1 HE		10th Flot
10:31	8,000	212	2 HE		10th Flot
10:32	8,909	-640	1 HE		1st Flot
10:33	6,965	-509	2 HE		10th Flot
10:34	6,265	-530	2 HE		11th Flot
10:35	5,777	-456	2 HE		11th Flot
10:36	5,256	-674	33 HE		10th Flot
10:37	4,571	-610	41 HE	1 hit	10th Flot
10:38	4,952	394	26 HE		10th Flot
10:39	4,118	-307	4 HE		11th Flot
10:40	4,588	-759	12 HE		10th Flot
10:41	4,062	-436	42 HE		10th Flot
10:42	3,372	-645	55 HE	1 hit	10th Flot
10:43	3,386	82	19 HE		10th Flot
10:44	3,983	643	44 HE	2 hits	10th Flot
10:45	4,378	-317	31 HE	2 hits	2nd Flot
10:46	5,855	1,072	2 HE		10th Flot
10:47	7,330	1,253	2 HE		1st Flot
10:48	8,513	1,191	1 HE		1st Flot
10:49	9,625	1,117	1 HE		1st Flot
10:50	8,622	1,053	1 HE		2nd Flot
10:51	9,308	982	2 HE		2nd Flot
8.8cm/45 Primary Total			510 shells	7 hits	1.4%