get a 12 NM area around it and see what kind of room there would have been to get around that." [encl (73)]

**Time of Transmission and Key Operational Milestones**

170. (C) Per SUBNOTE 001, the...

171. (C) CTF 74 transmitted SUBNOTE 001 at...

172. (C) Within the CSG-7 area of operations, SUBNOTES...

173. (C) SUBNOTE 001 was...

174. (C) CSG-7 staff members involved in preparing and approving SUBNOTE 001...

175. (C) ETC(SS) stated that SUBNOTE 001...

176. (C) SUBNOTES will normally be issued...

**Voyage Planning upon Receipt of SUBNOTE**

177. (U) The CO stated, "I pestered my Navigator on several occasions to get the SUBNOTE or least a draft. I'd say every three days or so, starting on December 26th or 27th, after Christmas, I told the Navigator to call Group SEVEN, and I wanted the SUBNOTE and I wanted it now." [encl (4)]

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178. (U) No officer, including the NAV on SAN FRANCISCO, called CSG-7 or CSS-15 to request the SUBNOTE. [encls (4)-(6)]

179. (U) The ANAV called CSG-7 on 04 January 2005 to check the status of CTF-74 SUBNOTE 001. [encls (7),(8)]

180. (U) The ANAV told ET1(SS) [REDACTED] at CSG-7 that he "needed to get the SUBNOTES out quicker and not to wait until the last minute because the review process will fall down because we don't have enough time to get everything done..." [encls (7),(8)]

181. (U) The ANAV asked ET1(SS) [REDACTED], "How are you routing us? ET1(SS) [REDACTED] replied, "We're giving you guys a standard track... I'll send the planning copy of the rough draft so you can get started on entering the data." [encls (7),(8)]

182. (C) The ANAV stated, "[REDACTED] in OP 61-17. He also stated that, "[REDACTED]. It is true, for this portion of the transit, after considering the SUBNOTE, [REDACTED]." [encls (7),(8)]

183. (U) NAV stated that "if the chain of command feels that there is a operational risk, for instance, passing within restricted waters, that would be an example, the command team, CO, XO, myself, ANAV, will place additional restrictions on the chart. We'll essentially gather around the Port Plotter and come up with a plan of action for what we're going to do but that depends on precisely what we're doing." [encl (6)]

184. (U) When the NAV was asked if he considered ORM mitigations in the conduct of the voyage about the Caroline Islands, he stated "No... we were not going to enter restricted waters." [encl (6)]

185. (U) ET1(SS) [REDACTED] called CSG-7 on 04 January 2005 to request a draft copy of just the points of CTF-74 SUBNOTE 001, no times. [encls (7)-(10)]
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186. (U) The ANAV based his risk calculations on an impression that this SUBNOTE track had been used previously. He stated that, "With regards to the details of the conversation with ET1 [CSG 7], I was told that other submarines had used this track previously." No CSG-7 personnel, including ET1(SS) [REDACTED], believe they communicated this message to the ANAV. ET1(SS) [REDACTED] developed SUBNOTE 001 from scratch. [encl (7),(8),(67),(76)]

187. (U) The ANAV informed the NAV by phone at 2030K on 04 January 2005 that SUBNOTE 001 was on board. [encl (6)-(8)]

188. (U) The ANAV stated, "The SUBNOTES for water space are typically, in my opinion, late." [encl (7),(8)]

189. (U) The following CSG-7 personnel performed Chart Corrections for the planned transit to Brisbane Australia:
ET1(SS) [REDACTED], ET2(SS) [REDACTED], ET2(SS) [REDACTED], ET2(SS) [REDACTED] ET2(SS) [REDACTED] and ET3(SS) [REDACTED]. [encl (2),(92)]

190. (U) The NAV and ANAV stated that they had enough time to conduct voyage planning and chart approval through chart E2101. [encl (4)-(10)]

191. (U) The CO stated, "I knew there was going to be significant navigation planning to get done." [encl (4)]

192. (U) Regarding his initial review of the charts prior to the ship's underway the CO stated, "I was concerned about the path--how were they going to route us down. I was familiar with the Caroline Islands as being a region that was going to be a concern to drive through[.]." The CO later stated: "The road was 40 miles wide, 20 on either side of my road... my mindset was, I had a road that was 20 miles wide that I was driving down... I had a road that was 20 miles wide that I was driving down that didn't have any navigation hazards on it[.]." [encl (4)]

193. (U) Regarding his opinion as to whether the SUBNOTE track had been used before, the CO stated: "I would assume it's been done before because Guam is sort of a frequent pit stop area, so I would assume it's been transited before... I would think that [CSG-7] probably have the routes to all the various areas on pass down notes, probably saved somewhere, where they just sort of pull them out and use them over and over again. This would
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be sort of the Guam to Brisbane one, would be my thought. I assume it would have been done before." [encl (4)]

194. (U) The XO believed CSG-7 re-used SUBNOTES based on conversations with NAV, who previously served at CSG-7. [encl (5)]

195. (U) The ANAV assessed the area of the Caroline Islands as follows: "As I looked at the E2202, I would characterize the bottom as a sloping bottom. It does not have a steep gradient in that area. Where the ship grounded, with regards to that particular chart, I do believe there to be good soundings in that area, not that specific spot, but the area. I came to that conclusion during the voyage planning. Specifically, in that spot, there is no indication of numerous sounding data. To me, that projected to be flat part of the ocean. I believed that area to be flat when looking at that chart during the planning stages. There were no severe changes in depth or bottom in that area. It's my belief, based off the other areas around it and the amount data that is highlighted on the chart, it's my belief that it was a charted area, that there was sounding data, and that it was a flat spot." [encls (7),(8)]

196. (U) The CO saw chart preparations for the trip to Brisbane going on since November 2004. During the chart preparation process, before his formal review to go through the checklist, the CO conducted a detailed review of the chart with SUBNOTE 001 plotted on it. [encl (4)]

197. (U) ET1(SS) [REDACTED] prepared the track plan and MHN for SUBNOTE 001 using two separate Planned Ops/Navigation Checkoff forms. [encls (9),(10),(93)]

198. (U) ET1(SS) [REDACTED] initialed the front page of the Planned Ops Checklist used for preparing chart E2202 while he was preparing the voyage plan for SUBNOTE 001. [encls (7)-(10),(93)]

199. (U) ET1(SS) [REDACTED] did not initial the Planned Ops Checklist as he completed steps 2 through 6 (pages 2 and 3) while preparing chart E2202 for the voyage plan using CTFP74 SUBNOTE 001. He did initial blocks for all other charts prepared on the same checklist. [encls (7)-(10),(93)]

200. (U) The ANAV stated, "It is my anticipation that ET1(SS) [REDACTED] will initial each one of the lines in the checklist."
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However, I've never enforced that [a]s long as I ask the question if the checklist was used and the prepared signature on the chart itself is signed for." [encls (7),(8)]

201. (U) ET1(SS) [redacted] initialized the front page and the step by step columns of the separate Planned Ops Checklist used for preparing charts 81048, 81060 and E2203. [encls (7)-(10),(93)]

202. (U) The CO stated, "I expect the NAV to look at every chart. I would expect them to present to me the best chart to navigate on." [encl (4)]

203. (U) The CO stated, "I did not look at the 81023... I did not look at that chart. I did not ask if there was another chart of this area." [encl (4)]

204. (U) The CO reported having full confidence in LCDR [redacted] abilities as NAV and as a voyage planner. He reported finding few errors in his chart reviews. [encl (4)]

205. (U) The CO evaluated the Navigation Department as his best department on the ship. He considered navigation to be one of the ship's strong areas upon taking command. [encl (4)]

206. (U) The CO depended on the XO (a served Navigator) to mentor and train the Navigator, not feeling confident in his own abilities in this area. [encl (4)]

207. (U) In comparing charts after the grounding, the CO stated that there is significantly more information on Chart E2202 than on Chart 81023 in terms of sounding data. However, the CO added that he did not look at Chart 81023 before getting underway and it was his general knowledge that Echo charts are significantly better. [encl (4)]

208. (C) Regarding why he had [redacted]. [encl (4)]
209. (U) Chart E2202 is not classified. The CO initially said he thought chart E2202 was classified. When he reviewed the chart during his interview, he realized the Chart was not marked CONFIDENTIAL. [encls (4),(43)]

210. (U) The CO said he did not look at any bathymetric survey information on the right side of the chart and did not review the bathymetric survey information relative to the SUBNOTE track. [encl (4)]

211. (U) The CO stated, "I am aware of the navigation practice of transferring soundings and navigation hazards from one chart to another chart. I would expect that to be done." [encl (4)]

212. (U) The CO stated, "they should have laid our track down on the 81023 chart. When they laid it down on that chart, they should have looked around for navigation hazards, and then transferred them over to the chart." [encl (4)]

213. (C) The ship did not use chart 81023 to verify that the MHN track was safe for navigation. According to interviews with the CO, XO and NAV, SAN FRANCISCO had operated in vicinity of the vicinity of chart E2202 and had the E2202 and 81023 charts prior to those operations and . None of the crew involved in Navigation for the January 2005 voyage had transited the Caroline Islands region previously. [encls (4)-(10)]

214. (U) ET1(SS) and the ANAV said they compared charts E2202 and 81023 in and agreed that the scales were really close and the sounding data was better on E2202. [encls (9),(10)]

215. (U) When ET1(SS) pulled chart 81023 from the chart locker, looked at it and remembered how he and the ANAV "while marginally better in scale, was not nearly as good in sounding data as chart E2202" and put it back in the drawer. [encls (9),(10)]

216. (U) The ANAV reviewed chart 81023 for 15 minutes on 05 January 2005 and noted the corrections from the previous operation in . He then compared the scales between
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chart 81023 and E2202 and felt the scales were virtually the same. Based on that, and the fact he already reviewed the chart extensively in October, he put chart 81023 away. [encls (7),(8)]

217. (U) The ANAV and ET1(SS) made the decision to not use chart 81023 while transiting the area of the grounding through the Caroline Islands. [encls (7)-(10)]

218. (U) The XO did not discuss with the ANAV or NAV other charts that cover the area of the grounding. [encl (5)]

219. (U) The XO said he did not know of chart 81023's existence, nor was it presented to him during his review of chart E2202. [encl (5)]

220. (U) When asked how he determined the E2202 chart was the better chart to use, the NAV stated that in his opinion E2202 had better sounding data by review of the contour lines. With respect to the 81023 chart, the NAV stated "It doesn't have contour lines on it. It does have sounding information but it does not have contour lines. Typically on SAN FRANCISCO when faced with this situation of a chart nearly the same scale we use the bottom contour charts because they are in my experience, they have better sounding information and also allow you to more accurately determine whether sounding checks with chart." [encl (6)]

221. (U) The ANAV said, "I did not take both charts [81023 and E2202] and look at them side by side for this transit. In reference to the sounding data, I looked at the Echo chart and looked at the sounding tracks that are provided on the right hand margin. I did look at that prior to this underway. I looked at the sounding tracks and at how many lines are on the chart and how many survey or sounding tracks are on the diagram to the right. That tells me that it was surveyed to some extent and that the sounding data with the contour lines that are available are better than the sporadic dots and sounding marks from the 81023." [encl (7)]

222. (U) The XO stated, "It's my opinion that these Echo Charts have been the best charts we've had... My belief was that the classified charts with the contours on them were the best product that the Navy had to offer... We look at other charts and you see the sounding data is not as extensive and feel that this would be a better chart in general[.]" [encl (5)]
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223. (U) When asked to compare sounding data between chart E2202 and chart 81023, the CO stated "From my review of the chart E2202, I looked to see the quality of the soundings by viewing the contours and sounding data throughout... I would say the contours indicate it's getting deeper there, there being where the incident occurred. Most of the time, it says where they've taken the data or talks about where the sources are. The easiest is just to compare this to that. It's not incredibly easy to do. In my opinion, [the sounding data on chart E2202] seems to be pretty decent. I don't know which chart is better between the E2202 or the 8100 series charts." [encl (4)]

224. (U) Chart INT 507 was not used in voyage planning for the Brisbane transit. [encls (4)-(10)]

225. (U) Charts 81048, 81054, 81060 and E2203 were approved by the CO prior to getting underway. Charts E2202, E2102 and E2101 were approved by the CO after the ship was underway. [encl (93)]

226. (U) ET1(SS) [REDACTED] did not know about the "Discolored Water Rep" spot on chart 81023. [encls (9),(10)]

227. (U) ET1(SS) [REDACTED] stated, "when I was looking at 81023, I do not remember a discolored water spot in the position relative to where the incident occurred. I did not plot the track on chart 81023 because I had determined the scales were close and the sounding data was phenomenally better on the other chart." [encl (9)]

228. (U) The CO, XO, NAV and ANAV did not know of the "Discolored Water Rep" prior to the ship grounding. [encls (4)-(8)]

229. (U) No navigation hazards were plotted on chart E2202 from other charts. [encls (6)-(10)]

230. (U) ET1(SS) [REDACTED] reviewed PUB 126 Sailing Directions 2002 6th edition (PUB 126) during the voyage preparation of SAN FRANCISCO's SUBNOTE. He stated, "There was no discernable information that I got from the Sailing Directions. I opened the Sailing Directions and read through the voyage plan that I had on this chart. I couldn't receive any discernable information from the area that would apply to my SUBNOTE." [encls (9),(10)]

Change 1

(b)(6)
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231. (U) The ANAV stated, "I did not review Sailing Directions SD PUB 126 for this chart this time." [encls (7), (8)]

232. (U) Regarding PUB 126, the NAV stated, "I did not review that for this. We were not approaching within ten nautical miles from land and Sailing Directions cover information prior to entering ports." [encl (6)]

233. (U) The XO did not review PUB 126 during his review of chart E2202. He stated, "it's not a habit of mine to use Sailing Directions for open ocean... In this case, with the water being so deep and we're in a SUBNOTE, it didn't occur to me to use it... I didn't think to consult the Sailing Directions." [encl (5)]

234. (U) The CO stated, "in my past experience I would expect the Sailing Directions to be brought to me if they had relevant information... The type of information that I've seen in Sailing Directions previously was more related to piloting... when I asked them the question if they reviewed the Sailing Directions, and they told me no, I wasn't surprised." [encl (4)]

235. (U) The CO did not review PUB 126 during his approval of chart E2202. He stated, "I did not ask for the Sailing Direction reference." [encl (4)]

**Underway Operations Pre-Grounding**

236. (U) According to the CO, the crew of SAN FRANCISCO was proficient and operating "at the top of our game" at the time of the underway on 7 January 2005 based on mission and recent inspection results. [encl (4)]

237. (U) In January 2005 CSS-15 awarded SAN FRANCISCO the Squadron's Navigation "N", The Deck "D", the Damage Control "DC", the Supply "S" and the Medical "M" for 2004. [encls (4), (94)]

238. [U] LCDR [REDACTED], the CSS-15 Engineer, stated that the awarding of the Navigation "N" to SAN FRANCISCO related it being a two boat squadron. [encl (253)]
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239. (U) During a six week ride in Fall 2004, the CSS-15 Engineer observed the SAN FRANCISCO team was pretty weak with the exception of the CO and COB. He added that the CO got very little support from key players and that there was little back up, not only in navigation, but across the board. During the same period the CSS-15 observed that CO was always driving things down with things never coming up to him. He observed that the CO was implementing a cultural changed resisted by others. [encl (253)]

240. (U) According to the CSS-15 Engineer, another Post-XO rider, CDR [REDACTED], described with concern observing a full or flank bell transit conducted by SAN FRANCISCO through challenging waters. [encl (253)]

241. (U) The CSS-15 Engineer observed that SAN FRANCISCO had a habit of operating the ship at high speeds and was aggressive about handling the ship. [encl (253)]

242. (C) In SAN FRANCISCO received an ABOVE AVERAGE during a Tactical Readiness Evaluation (TRE) and was certified to carry Mines based on a Mine Readiness Certification Inspection (MRCI) during the previous year. SAN FRANCISCO successfully [REDACTED] [encls (4),(16),(17),(95)]

243. (U) CDR [REDACTED], CSS-15 Deputy Commander, assessed the root problems on SAN FRANCISCO in July as follows: "Captain, after spending 3 ½ days on SAN FRANCISCO I believe we have reaffirmed many of your previous assessments as to the nature of the problems on board. I believe the five main factors contributing to the ship's problems are:

a. Entrenched informality.
b. Poor deck plate supervision.
c. Lack of effective key personnel.
d. Lack of experienced personnel.
e. Low OPTEMPO."

[encls (257)-(259)]
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244. (U) Prior to departing Guam, only the first three charts of the transit had been approved through the CO. These charts were scheduled to be used through the evening watch of 7 January 2005. [encls (4), (6), (93), (97), (98)]

245. (U) During the afternoon and evening watches on 7 January 2005, the CO reviewed the next three charts required, covering the areas from the Caroline Islands to the Bismarck Archipelago. These three Echo charts were approved without correction. [encls (4), (97), (98)]

246. (C) Upon review of the entire SUBNOTE track to Australia, the CO recognized that the SUBNOTE would require [redacted]. [encl (4)]

247. (U) The ship's focus for the transit to Australia was to conduct watchstander qualifications. [encls (4)-(6), (94), (95), (102)]

248. (U) The CO reported "feeling ill" during the several days preceding the underway and the first two days of the transit. He experienced fatigue, low-grade fever and loss of appetite, but had not seen medical personnel, nor taken any medication other than Motrin and throat lozenges. He rested more than normal due to the illness, but reported still carrying out his normal duties: "I was at full power." Other members of the ship's leadership and watchstanders reported him resting for several short periods during the day on 7 and 8 January 2005, including 1020-1120 on the morning of the grounding. [encls (4)-(6), (103)]

249. (U) The ship scheduled a "Crossing the Line" ceremony for 2000K, 8 January 2005, roughly coinciding with the ship's scheduled equator crossing. Some planning and preparatory activity occurred prior to underway and during the underway period before the grounding. The underway activity included an unscheduled 24-minute battlestations period the afternoon of 7 January 2005 following the prank removal of the CO stateroom door, a brief ceremony the evening of 7 January 2005, and a planning meeting for "shellbacks" the morning of 8 January 2005. SAN FRANCISCO's leadership said these events did not distract the crew or the leadership from operations in progress. [encls (4), (5), (94), (102)-(104)]
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250. (U) SAN FRANCISCO leadership held an Ops Brief at 1600K on
7 January 2005. No charts were brought to the meeting, and no
discussion of the overall voyage plan or the next day’s planned
transit of the Caroline Islands was held. The meeting focused on
material, training and general scheduling items. It lasted
approximately 20 minutes. [encls (4)-(5),(94),(95)]

251. (C) The scheduled evening periscope depth evolution on 7
January 2005 was conducted during an attempt to
attributed the problems to "The ENG
root cause was
[encls (4),(60),(95)]

252. (C) SAN FRANCISCO left the
chart E2203 . [encls (2),(53),(60)]

253. (C) SAN FRANCISCO shifted onto chart E2202
Although this chart was approved
[encls (4),(48)-(51),(53),(60),(97),(98),(107),(108)]

254. (U) CO reported being very confident in the chart selected
for this transit. "I've gone out with these [echo] charts and
believed in them. I think I've already stated on several
occasions, I had a lot of confidence in this chart [E2202]."
[encl (4)]

255. (U) The CO reported that he considered the passage of the
Caroline Islands under SUBNOTE 001 to be an "open ocean
transit." He described the route through the islands as a "40
mile wide road" centered on his track with no navigational
hazards. [encl (4)]
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256. (U) Based on interviews with CO, XO, NAV, and ANAV there had been no instances when SAN FRANCISCO imposed operational constraints on ship's speed or depth due to navigational considerations except when the ship was operating in "restricted waters." [encls (4)-(8)]

257. (U) Other OODs and supervisory personnel also considered this a "standard transit" and "routine." [encls (5),(95),(97),(98)]

258. (U) CO's Night Orders of 7-8 January 2005 directed the OOD to "drive to get ___ NM ahead, do not get more than ___ NM behind," and to stay within 4 NM of SUENOTE track. Maximum speed authorized in the night orders was "Full." There was no plan to station the piloting party or modified piloting party mentioned in the night orders, nor were there any additional navigation precautions imposed. [encls (4),(97),(98),(102),(107),(108)]

259. (U) Although CO verbal direction to the 7 January 2005 1800-2400 watch OOD (LT ____ ____ _) was to get ahead, the OODs did not believe there was an urgent requirement to get far ahead of PIM. The basis for getting ahead was described by the NAV and other OODs as ship's practice, and in anticipation of a drill period to be conducted in the afternoon. The CO stated there was "no particular urgency" but that the ship was constantly doing training and evolutions and had a full schedule for the next afternoon. [encls (4)-(6),(97),(98),(109)]

260. (C) ET2(SS) ____ ____ _ the 0000-0600 watch QMOW on 8 January 2005, said he expressed concern about transiting the Caroline Islands to the OOD and off-going QMOW while preparing to relieve the watch. He wondered if "it would be a good idea to station the modified piloting party because of the island chains. The island chains were a concern to me because I have never seen anything driven through the islands like that. I just thought maybe. I don't know when it was the last time that anyone drove through there. The soundings were old, especially with islands; they kind of grow fast. I remember asking someone, I don't remember who, who had drove through the islands before, they said this was a [Redacted]. I was talking to the ANAV, who said it was a [Redacted]. I left my concerns with the Officer of the Deck." Although neither the off-going QMOW nor the OOD (LT ____ ____ _) remember ET2(SS) __ ____ _ specific
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261. (U) No member of the command team reported being concerned for navigational safety on chart E2202 when deciding to authorize or order flank speed. [encls (4), (6), (97), (98), (102), (109)]

262. (U) According to his statement, the 1800-2400 watch OOD on 7 January 2005 discussed operations at Ahead Flank with the CO, however did not get specific direction to correct the night orders, nor did he discuss the limitation of Ahead Full written in the night orders. OODs stated that they were not aware of the CO Night Order limit being "Ahead Full." The CO stated that he did not remember limiting the ship's speed to Ahead Full in his Night Orders. [encls (4), (95), (97), (98), (102)]

263. (U) The ship's Deck Log documents LCDR (ENG) as having the Conn for the entire 1800-2400 watch, however he stated that he only had the watch for approximately one hour at the start of the watch, and secured as OOD under instruction (a proficiency watch) to supervise engineering plant maintenance. [encls (60), (95), (97), (98)]

264. (U) According to fathometer logs, during the 1800-2400 watch on 7 January 2005, 15 minute soundings taken with the BQN-17 fathometer varied between 1771 and 4910 fathoms total water depth. All soundings showed deep water with shallowing gradients of over 1300 fathoms per hour were observed at times, however, all soundings were consistent with charted soundings north of the Caroline Islands exiting the region of the Marianas Trench. [encls (53), (61), (110)]

265. (U) QMOWs reported that BQN-17 fathometer soundings during this transit were taken using the aural method only. Digital readouts and the paper trace were not used because they were considered unreliable. [encls (19), (48)-(51)]

266. (U) Although the OODs for the 1800-2400 watch on 7 January 2005 and the 0000-0600 watch on 8 January 2005 discussed operating at Ahead Flank during their turnover, neither annotated the change in limit specified in the night orders. No member of the watch team questioned the operation at flank
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speed, above the night orders authorized maximum. [encls (6), (97), (98), (102), (107)-(109)]

267. (U) At the time of watch turnover at 0600K on 8 January 2005, SAN FRANCISCO was ______ NM ahead of PIM. Due to periscope depth evolutions during "Field Day" (a detailed cleaning of the ship), SAN FRANCISCO had fallen back to ______ NM ahead by 0945K when the ship secured from periscope depth, and ______ NM ahead when flank speed was ordered at 1131K. [encls (2), (6), (53), (97), (98)]

268. (U) Following scheduled officer training, LCDR ______ (NAV) relieved the watch at 0930K, with LTJG ______ taking the Conn as OOD under instruction. At 0958K the Deck Log records the NAV taking the Deck and the Conn, however interviews with the NAV and LTJG ______ report that LTJG ______ retained the Conn until the ship grounded at 1142K. [encls (6), (60), (109)]

269. (U) The CO's principle objectives for the periscope depth period during the 0600-1200 watch were to ventilate the ship coincident with Field Day (ship-wide cleaning) and obtain email traffic from the Defense Attaché's office in Australia relating to the upcoming visit to Brisbane. [encls (4), (102)]

270. (U) CO's Night Orders for 7-8 January 2005, effective up to the time of the grounding, prescribed a fix and sounding interval of 15 minutes. [encls (4), (6), (102)]

271. (U) Based on his preliminary review of charts while in port, the CO thought the ocean bottom in the area surrounding the SUBNOTE 001 track was "quite varied." [encl (4)]

272. (U) Although he approved Red and Yellow soundings on the transit charts, a sounding interval of every ______ minutes, and operations to maximum operating depth at speeds up to maximum, the CO acknowledged in his interview that "without the fathometer in continuous, the Red and Yellow soundings methodology is of limited use." [encls (4), (102)]

273. (U) The 0645K sounding on 8 January 2005 was 832 fathoms beneath the keel, which translated to a total water depth of 935 fathoms. The charted water depth was between 1200 and 1300 fathoms. This sounding did not meet the ship's requirements for "checking with chart." Neither the OOW nor the OOD noted or reported the discrepancy. [encls (6), (19), (35), (43) (53), (60), (61)]

(b)(1) (b)(6)
Subj: COMMAND INVESTIGATION OF THE APPARENT SUBMERGED GROUNDING OF USS SAN FRANCISCO (SSN 711) APPROXIMATELY 360 NM SOUTHEAST OF GUAM THAT OCCURRED ON 8 JANUARY 2005 (U)

274. (U) Field Day was conducted from 0700K to 1000K on 8 January 2005. Control watchstanders reported not being distracted from their duties by the cleaning evolution. [encls (6),(48),(49),(94),(111),(112),(119)]

275. (C) Sonar Search Plan. There was [encls (6),(97),(98),(105),(107),(108),(111),(113),(114)]

276. (U) The CO had not promulgated any formal guidance on setting up the Control Room VMS displays available to be monitored remotely in his stateroom. [encls (4),(35)]

277. (U) The digital nautical charts loaded in VMS depicted a shallow danger spot correlating to the discolored water plotted on chart 81023 within several miles of the ship's intended track. Although the VMS chart was displayed on the Conn for the entire transit of the 090 track leg from 1028K to the grounding at 1142K on 8 January 2005, no watchstander noticed it. [encls (7)-(10),(19),(46)-(52),(57),(115),(116),(117)]

278. (U) Weather in the area at the time of the grounding, as reported upon emergency surfacing and manning the Bridge was: clear sky, excellent visibility, sea state 0-1, visibility 10 NM, 30% cloud cover, 2-4 ft wave height, seas from 090, wind 3-5 kts from 090. [encl (123)]

279. (U) The last recorded sounding in the fathometer log prior to grounding was 1032 fathoms beneath the keel, taken at 1130K. The E2N-17 fathometer was set to DEEP-NON SECURE operating mode, MANUAL keying mode, sounding displayed in fathoms. The ship increased speed to Ahead Flank and was ordered to depth 500 feet from 400 feet at 1131K. The OOD and QMOW did not take an additional sounding prior to changing depth, stating that they 'had just taken one.'' [encls (6),(19),(53),(61),(109)]

280. (U) Soundings in the hour before the grounding had been trending shallower, but remained between 1494 and 998 fathoms (total water depth) and were consistent with chart E2202. [encls (43),(61)]

Change 1
Subj: COMMAND INVESTIGATION OF THE APPARENT SUBMERGED GROUNDING OF USS SAN FRANCISCO (SSN 711) APPROXIMATELY 350 NM SOUTHEAST OF GUAM THAT OCCURRED ON 8 JANUARY 2005 (U)

281. (C) At 1138K on 8 January 2005 at [redacted]. Although required by CO Standing Order 2 when going deeper, LT [redacted] the OOD under instruction, stated to the OOD that [redacted]. The OOD told him that a [redacted]. Four minutes later, the ship grounded at 07°44.7’N, 147°11.6’E. [encls (6), (47), (60), (61)]

282. (U) The ship’s course was altered to starboard during the grounding. After the Emergency Surface, the Helmsman resumed ordered course of 090. The ship continued on the 090 course until 1202K and then reversed course to the left to 270 driving about 800 yards South of the grounding area between 1215K and 1230K." [encls (53), (60), (101)]

Casualty Response

Ship’s Status at the Time of Grounding

283. (U) At the time of the grounding, the ship was rigged for high-speed operations. Normal underway watches were stationed. No other significant evolutions were in progress. [encls (6), (19), (112), (122), (124)-(130)]

284. (U) The rig for high-speed operations placed the ship in a condition of maximum safety for submerged operations by imposing special measures and procedures designed to control or to recover from ship control casualties. [encl (131)]

285. (U) Lunch was in progress when the grounding occurred. [encls (7), (94), (103), (111)]

286. (C) The BQN-17 was [redacted]. The BQS-15 [encls (61), (132), (133)]

287. (U) No towed sonar array or floating wire was deployed at the time of the grounding. [encls (6), (121)]

288. (U) Shortly before the grounding, Sonar gained DIMUS trace bearing 090T (000R) and was drawing left over a two minute
interval to 060T (330R), the DIMUS trace was approximately 20 degrees wide, initially classified as environment or rain. The AN/BQQ-5 Spherical Array Passive Broad Band (SAPBB) sonar system was operated in the mode. The AN/UQN-9 was recording at the time of the grounding. Post-analysis showed a combination of background (biologics, ambient noise) and own-ship flow noise. When the Sonar Supervisor directed to be secured to gain and analyze the DIMUS Trace, the trace faded. [encls (100), (113), (121)]

289. (U) The DIMUS trace bearing 093T was reported to the OOD as environmental and was not sent to the Fire Control system. [encls (100), (118), (134)]

290. (U) The QMOW on watch at the time of the grounding, ET2(SS) , said he was knocked unconscious for a short time when the ship grounded. According to the ship’s Deck Log, the grounding occurred at 07°44.7’N, 147°11.6’E. A relieving QMOW, ET2(SS) , stated that this Deck Log position was taken from the RLGN remote touch screen display that was paused some time after the grounding. [encls (19), (50), (60)]

291. (U) Based on a second-by-second analysis of the ship’s deceleration recorded in RLGN channel 1 data, the ship grounded at 1142K (and 20 seconds) at 07°45.5’N, 147°12.3’E. [encl (60)]

292. (C) According to the , SAN FRANCISCO chart 81023

[encls (53), (60), (137), (146)]

293. (C) SAN FRANCISCO had been operating with a water feature chart 81023. The LANDSAT shoal

(43), (53), (102), (137), (146)]

294. (U) SAN FRANCISCO grounded on a seamount. Rocks were found inside the forward ballast tanks, sonar dome, and wedged in the

Change 1

(b)(1) (b)(3) (b)(6)
torpedo tube shutter doors. This grounding was reported as two
distinct impacts occurring in rapid succession. [encls
(13), (14), (135), (136), (138)]

295. (C) SAN FRANCISCO

[encl (101)]

296. (U) At time of grounding:

a. The CO was in the Wardroom sitting at the head of the
table and sustained no injuries. [encl (4)]

b. The XO was in Control next to the Helm and was shearing off an Emergency Air Breathing (EAB) manifold and
outside the CO's Stateroom door. [encl (5)]

c. The COB was sitting in the CPO quarters on the outboard
bench locker. [encl (103)]

d. The OOD was standing six inches starboard of centerline

[encl (6)]

e. The Ship's Independent Duty Corpsman (IDC), HM1(SS)
was in the crew's washroom second level and sustained no
injuries. [encl (139)]

f. LTJG was the Conning Officer. He was standing
next to the NAV near the ASVPU (sonar repeater) and sustained a
into the Ship's Control Party chairs. [encl (109)]

297. (U) The ship was rigged for high speed operations with the
following exceptions:

a. The Diving Officer of the Watch (DOCW) did not have his
seatbelt fastened. He was annotating Red, Yellow and minimum
expected sounding information on the placard on the SCP.

b. The Chief of the Watch (COW) did not have his seatbelt
fastened; he was retrieving a binder in support of the 1200
position report and contacting the COB on the MJ sound powered
phones.
Subj: COMMAND INVESTIGATION OF THE APPARENT SUBMERGED GROUNDING OF USS SAN FRANCISCO (SSN 711) APPROXIMATELY 360 NM SOUTHEAST OF GUAM THAT OCCURRED ON 8 JANUARY 2005 (U)

c. The Engineering Officer of the Watch (EOOW) did not have his seatbelt fastened due to watch relief.

d. The Reactor Operator was not sure if he was wearing a seatbelt, but he did not have significant injuries.

e. The Throttleman did not have a seatbelt. Per NAVSHIP drawings the Throttleman chair is not equipped with a seatbelt. SSM OP 61-11. [encls (112), (124), (126), (127), (130), (141), (142)]

298. (U) The DOOW was injured when the DOOW chair was dislocated from the base by the impact of a unidentified person, (possibly ET2(SS) [encls (112), (143)].

299. (U) The COW sustained injuries from [encls (124), (143)]

300. (U) The Throttleman [encls (130), (143)]

Emergency Procedures

301. Emergency procedures are actions taken immediately to enhance the ship’s ability to minimize effects of the emergency. Actions common to all emergencies include establishing communications, getting sufficiently qualified people to the scene, and securing nonessential evolutions. [encl (144)]

302. The General Emergency procedure is designed to localize the problem and minimize the probability of compounding the casualty. Combating the emergency successfully requires exercising judgment in an intelligent, coordinated effort. [encl (144)]

303. The Collision Procedure is designed to place the submarine in best position to control the effects of a collision, including damage to Main ballast tanks (MBTs) and ship control surfaces that may lead to loss of depth control. [encl (145)]

304. The Collision Procedure is implemented when collision is imminent or has occurred. Immediate actions include sounding the Collision Alarm and announcing that a collision has occurred. Immediate actions also include maneuvering the ship and taking Change 1