Loran-C ASF correction





33rd Annual Convention & Technical Symposium International Loran Association 26 October, 2004 Tokyo, Japan H i royuki Kurosu Senior Engineering Officer Aids to Navigation Engineering Division Maritime Traffic Department Japan Coast Guard





Receiving system configuration

























Before ASF correction

After ASF correction

1: At Takeshiba - pier





2: In Tokyo Bay





3: 35 - 34°





4: 34 - 33°





5: 33 - 32°





6: 32 - 31°





7: 31 - 30°





8: 30 - 29°





9: 29 - 28°





10: 28° - Ogasawara Is.





11: In Futami-Port





ASF Correction







Conclusion :

- ASF corrections will minimize Loran-C absolute error, and at the same time 2 DRMS of error also can be improved.
- When calculating ASF values, the most important factor was the time synchronization of Loran-C and GPS.
- When Loran-C/GPS hybrid receivers are spread throughout the world, the cost will go down and requirement of a buckup system for GPS will be accelerated inevitably.
- In order for users to use the Loran-C system effectively, and as you can see the results from this evaluation test, it is important to improve positioning accuracy of Loran-C itself.





