

IEEE/PES TRANSFORMERS COMMITTEEwww.transformerscommittee.org

Hosted by Mr. Earl Harris and San Diego Gas & Electric Company

Catamaran Resort Hotel; San Diego, California, USA

Spring 2004 Meeting -- March 7-11, 2004

NOTE: See Page 3 for a key to the abbreviations. A vertical line in the left margin indicates a noteworthy revision since last issue.

| <u>DATE/TIME</u> | <u>ACTIVITY</u> | <u>SUB-COM</u> | <u>ACTIVITY CHAIR</u> | <u>ROOM CAP/ARR/AV</u> | <u>MEETING ROOM</u> |
|--|---|----------------|------------------------------|--|-----------------------------------|
| Saturday, March 6 | | | | | |
| | No Meetings. No Meeting Registration. | | | | |
| 9:00 am - 3:00 pm | "Early-bird" Golf Outing. If interested, contact Red Hager at 760/789-3022 or redhager@ieee.org. | | | | |
| Sunday, March 7 | | | | | |
| 7:00 am - 2:00 pm | Technical Tour #1: <u>SCE/Edison ESI Repair Facility</u> . Bag breakfast and box lunch provided on the bus. -- Non-restricted tour (everyone is invited, including companions). Advance registration necessary. -- Contact Rob Morrison at 714/895-0364 or robert.w.morrison@sce.com for more information. -- Buses will leave from the front of the Catamaran at 7:00 am. Return to hotel around 2:00 pm. | | | | |
| 1:00 pm - 7:00 pm | Meeting Registration | | | 1 phone line | Kon Tiki Foyer |
| 2:00 pm - 5:30 pm | Administrative SC -- Closed meeting, by invitation only | Admin. | K. Hanus | 30 HS P (w/snack buffet) | Toucan |
| <u>3:00 pm</u> - 5:30 pm | ASC C57 NEMA Delegation -- Closed meeting, by invitation only | ++ | C. Drexler | 30 HS P | Macaw |
| 6:00 pm - 8:00 pm | Hospitality Reception -- All members, guests & companions are welcome -- Advance registration please. Casual beach attire encouraged. | | | 300 Recept. | Kon Tiki Ballroom (inside) |
| Monday, March 8 -- Monday Breaks Sponsored by <u>Tamini Transformers USA, LLC.</u> ** | | | | | |
| 7:00 am - 5:00 pm | Meeting Registration | | | 1 phone line | Kon Tiki Foyer |
| 7:00 am - 8:00 am | Breakfast - Attendees (no companions please) | | | 200 RT (flow) | Multipurpose Rm |
| 8:00 am - 9:00 am | Breakfast - Companions | | | 75 RT | Rousseau Center |
| 9:15 am - 3:00 pm | Companion Tour: <u>La Jolla - Cabrillo Nat. Monument and Seaport Village Tour</u> . Advance registration required. -- The bus will leave from front of Catamaran at 9:15 am. Return around 3:00 pm. Includes lunch. | | | | |
| 7:05 am - 7:50 am | Newcomers Orientation Breakfast Meeting -- All "Newcomers" & Guests are encouraged to attend. Food will be outside room at 7:00 am. Please be ready for a 7:05 am meeting start. | | D. Fallon | 40 CL P | Rousseau E/W (first floor) |
| 7:05 am - 7:50 am | Distribution SC Coordination Meeting (closed mtg) | | E. Smith | 15 CONF | Reserved area in Atoll Restaurant |
| 8:00 am - 9:15 am | TF Dry-Type Reactors | Dry | R. Dudley | 40 CL O | Boardroom East |
| 8:00 am - 9:15 am | TF Arc Furnace Transformers C57.17 | Power | D. Corsi | 40 CL P | Boardroom West |
| 8:00 am - 9:15 am | TF Core Overexcitation Requirements (new) | PCS | C. Stiegemeier | 60 CL P * | Cockatoo |
| 8:00 am - 9:15 am | WG Electronic Data Transmittal PC57.12.37 | Dist | T. Callsen/ R. Hollingsworth | 80 CL P * | Toucan |
| 8:00 am - 9:15 am | TF Winding Temperature Indicators | IL | P. McClure | 100 CL O * | Macaw |
| 8:00 am - 9:15 am | WG Acoustic Partial Discharge Measurements | DiTests | J. Harley | 150 CL S3 (only 150 chairs) | Kon Tiki Ballroom |
| | | | | * add 2-3 rows of theater seating in rear of room if necessary | |
| 9:15 am - 9:30 am | Break (beverages only) | | | Aviary Foyer | |

** Contact Joe Watson (joe_watson@ieee.org) if you are interested in sponsoring a future coffee-break.

| <u>DATE/TIME</u> | <u>ACTIVITY</u> | <u>SUB-COM</u> | <u>ACTIVITY CHAIR</u> | <u>ROOM CAP/ARR/AV</u> | <u>MEETING ROOM</u> |
|------------------------------------|--|----------------|----------------------------|---|----------------------------------|
| Monday, March 8 (continued) | | | | | |
| 9:30 am - 10:45 am | WG 3-ph UG Distribut. Trans. C57.12.24 | UTNP | J. Sullivan/ G. Termini | 40 CL | Boardroom East |
| 9:30 am - 10:45 am | WG Thermal Evaluation of Power and Distribution Trans. C57.100 | IL | R. Wicks | 40 CL P | Boardroom West |
| 9:30 am - 10:45 am | TF Electrical Partial Discharge Measurements Guide C57.113 (new) | DiTests | E. Lemke | 60 CL P | Cockatoo |
| 9:30 am - 10:45 am | WG 1-ph OH Dist. Trans. C57.12.20 | Dist | A. Wilks/ T. Cooper | 80 CL O | Toucan |
| 9:30 am - 10:45 am | WG PCS Rev. to Test Code C57.12.90 | PCS | B. Forsyth | 100 CL O | Macaw |
| 9:30 am - 10:45 am | WG Revision Installation Guide C57.93 | Power | M. Lau | 150 CL S3 | Kon Tiki Ballroom |
| 10:45 am - 11:00 am | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 11:00 am - 12:15 pm | WG Sound Level Measurement Guide | ASV | [TBD] | 40 CL | Boardroom East |
| 11:00 am - 12:15 pm | WG Temp. Rise Test Procedures in Section 11 of C57.12.90 | IL | P. Payne | 40 CL | Boardroom West |
| 11:00 am - 12:15 pm | WG Revision to Low Frequency Tests | DiTests | M. Perkins | 60 CL P | Cockatoo |
| 11:00 am - 12:15 pm | WG 1-ph Padmount Distribution Transformers C57.12.25 | Dist | A. Ghafourian/ I. Ares | 80 CL O | Toucan |
| 11:00 am - 12:15 pm | WG Shunt Reactors C57.21 (new) | Dry | R. Dudley | 100 CL O | Macaw |
| 11:00 am - 12:15 pm | TF Trial-use Std for Control Cabinets | Power | J. Watson | 150 CL S3, P | Kon Tiki Ballroom |
| 12:15 pm - 1:30 pm | Lunch Mtg - Standards Develop. Process Review -- All WG & TF Chairs are encouraged to attend. -- Advance reservation necess. (\$15 for box lunch). -- IMPORTANT: Bring your ticket to the lunch. | | B. Chiu/ T. Prevost | 80 RT P (keep tbis from bkfst, set food for guarantee) | Multipurpose Rm |
| 1:45 pm - 3:00 pm | WG Dry-Type Gen. Require. C57.12.01 | Dry | J. Sullivan | 40 CL | Boardroom East |
| 1:45 pm - 3:00 pm | WG Sec. Network Protectors C57.12.44 | UTNP | D. Mulkey | 40 CL | Boardroom West |
| 1:45 pm - 3:00 pm | SC HVDC Converter Transformers and Smoothing Reactors | HVDC | R. Dudley | 60 CL O, P | Cockatoo |
| 1:45 pm - 3:00 pm | WG 3-ph Padmount Distribution Transformers C57.12.34 | Dist | R. Stahara/ S. Shull | 80 CL O | Toucan |
| 1:45 pm - 3:00 pm | WG PCS Revisions to C57.12.00 | PCS | S. Snyder | 100 CL | Macaw |
| 1:45 pm - 3:00 pm | WG LTC Performance C57.131 | Power | W. Henning/ C. Colopy | 150 CL S3, P | Kon Tiki Ballroom |
| 3:00 pm - 3:15 pm | <i>Break (beverages and treats)</i> | | | Aviary Foyer | |
| 3:15 pm - 4:30 pm | Joint WG Optical ITs C57.13/PSIM P1601 | IT/PSIM | Rahmatian/ Gilleland | 40 CL P | Boardroom East |
| 3:15 pm - 4:30 pm | WG Liquid-immersed Secondary Network Transformers C57.12.40 | UTNP | B. Klaponski | 40 CL | Boardroom West |
| 3:15 pm - 4:30 pm | WG Semiconductor Rectifier Transformers C57.18.10 | PCS | S. Kennedy | 60 CL P | Cockatoo |
| 3:15 pm - 4:30 pm | WG for Bar Coding Distribution Transformers C57.12.35 (new) | Dist | L. Matthews/ G. Termine | 80 CL P | Toucan |
| 3:15 pm - 4:30 pm | WG Revision of Impulse Guide C57.98 | DiTests | A. Molden | 100 CL | Macaw |
| 3:15 pm - 4:30 pm | WG Transformer Life Extension C57.140 | Power | R. James | 150 CL S3, O | Kon Tiki Ballroom |
| 4:30 pm - 4:45 pm | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 4:45 pm - 6:00 pm | Presentation #1: "Proposed Test to Determine Zo for Transformers with Interconnected Windings", by G. Rosselli ** | | Sponsor: PCS | 150 TH S3, P (add podium and lapel mic) | Rousseau Center (first floor) |
| 4:45 pm - 6:00 pm | Presentation #2: "Transportation Issues of Power Transformers", by T. Lundquist, W. Hoffmann, E. Schweiger, M. Silvestre ** | | Sponsor: Power | 150 CL S3, P (add podium and lapel mic) | Kon Tiki Ballroom (second floor) |
| No Evening Activity Planned | | | | | |

** Contact Greg Anderson (gwanderson@ieee.org) if you are interested in making a technical presentation at a future meeting.

KEY

> -- activity continued into another session / from another session
 ++ -- not a Transformers Committee activity TBD = to be determined
 O = overhead projector; P = PC projector; F = flip chart; S1 = sound (see note)
 S2 = stand mic in front only; S3 = stand mic in front & 1 stand mic at mid-room

CL -- classroom seating (with head table for 2-3)
 TH -- theater seating (with head table for 2-3)
 RT -- multiple roundtable (8-10/table)
 HS -- one hollow square

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|---|---|----------------|----------------------------|---|---------------------|
| Tuesday, March 9 -- Tuesday Breaks Sponsored by Tree Tech USA ** | | | | | |
| 7:00 am - <u>12:00 pm</u> | Meeting Registration | | | 1 phone line | Kon Tiki Foyer |
| 7:00 am - 8:00 am | Breakfast - Attendees (no companions please) | | | 200 RT (flow) | Multipurpose Rm |
| 8:00 am - 9:00 am | Breakfast - Companions | | | 75 RT | Rousseau Center |
| 9:15 am - 3:00 pm | Companion Tour: <u>Coronado and Old Town Tour</u> . Advance registration required. -- The bus will leave from front of Catamaran at 9:15 am. Return around 3:00 pm. Includes lunch. | | | | |
| 8:00 am - 9:15 am | WG Test Requirements for HV Instrument Transformers C57.13.5 | IT | R. McTaggart/ P. Riffon | 40 CL O | Boardroom East |
| 8:00 am - 9:15 am | WG Switching Transients Induced by Transformer/Breaker Interaction | PCS | R. Degeneff | 40 CL O, P | Boardroom West |
| 8:00 am - 9:15 am | WG Guide for DGA in LTCs C57.139 | IF | R. Ladroga | 60 CL | Cockatoo |
| 8:00 am - 9:15 am | WG Enclosure Integrity C57.12.28, C57.12.29, C57.12.31, C57.12.32 | Dist | R. Olen/ D. Mulkey | 80 CL O | Toucan |
| 8:00 am - 9:15 am | TF Def. Thermal Upgraded Insulation | IL | D. Platts | 100 CL | Macaw |
| 8:00 am - 9:15 am | WG West Coast, with TF for Revision of IEEE 62, C57.117 and C57.125 | Power | M. Lau | 150 CL S3 | Kon Tiki Ballroom |
| 9:15 am - 9:30 am | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 9:30 am - 10:45 am | WG Thermal Evaluation C57.12.56 and C57.12.60 | Dry | R. Provost/ R. Wicks | 40 CL | Boardroom East |
| 9:30 am - 10:45 am | TF Joint/PSIM Low PF Measurement | PCS | E. Se | CANCELLED | |
| 9:30 am - 10:45 am | WG Neutral Ground. Devices PC57.32 | PCS | S. Schappell | 40 CL | Boardroom West |
| 9:30 am - 10:45 am | WG Natural Ester-based Fluids | IF | P. McShane | 60 CL | Cockatoo |
| 9:30 am - 10:45 am | WG Std Terminology C57.12.80 (new) | Stds | T. Raymond | 80 CL | Toucan |
| 9:30 am - 10:45 am | WG Thermal Duplicate Guide PC57.145 | IL | B. Beaster | 100 CL | Macaw |
| 9:30 am - 10:45 am | TF Functional Life Tests, De-energized Tap Changers (DETC) | Power | P. Hopkinson | 150 CL S3, P | Kon Tiki Ballroom |
| 10:45 am - 11:00 am | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 11:00 am - 12:15 pm | WG ITs for Electronic Meters & Relays | IT | C. TenHaagen | 40 CL | Boardroom East |
| 11:00 am - 12:15 pm | WG Loss Tolerance and Measurement | PCS | E. teNyenhuus | 40 CL P | Boardroom West |
| 11:00 am - 12:15 pm | WG Revision of Oil Guide C57.106 | IF | J. Thompson/ T. Oommen | 60 CL O | Cockatoo |
| 11:00 am - 12:15 pm | WG Distribution Substation Transformers C57.12.36 | Dist | Aho/Rossetti | 80 CL P | Toucan |
| 11:00 am - 12:15 pm | TF Rev. to Temp. Ratings in C57.12.00 | IL | D. Marlow | 100 CL | Macaw |
| 11:00 am - 12:15 pm | TF Bushing Applicat. Guide C57.19.100 | Bush | T. Spitzer | 150 CL S3 | Kon Tiki Ballroom |
| 12:15 pm - 1:45 pm | Speaker Luncheon. Advance registration is necessary -- Mr. James E. Tucker, "Happiness is a Choice". -- IMPORTANT: Bring your ticket and place on table to indicate your meal selection. | | | 200 RT S1, P <u>elevated</u> table for 6, lectern w/mic | Multipurpose Rm |
| 1:45 pm - 3:00 pm | WG Instrument Transformer Standard Requirements C57.13 | IT | T. Nelson | 40 CL O | Boardroom East |
| 1:45 pm - 3:00 pm | WG Dry-Type Test Code C57.12.91 | Dry | D. Foster | 40 CL P | Boardroom West |
| 1:45 pm - 3:00 pm | WG Revision of C57.12.10 | Power | J. Arteaga | 60 CL P | Cockatoo |
| 1:45 pm - 3:00 pm | WG Loss Evaluation Guide C57.12.33 | Dist | D. Duckett/ T. Pekarek | 80 CL | Toucan |
| 1:45 pm - 3:00 pm | WG Revision to Loading Guide C57.91 | IL | T. Raymond | 100 CL | Macaw |
| 1:45 pm - 3:00 pm | WG Dielectric Test Tables, Liquid-filled | DiTests | P. Hopkinson | 150 CL S3, P | Kon Tiki Ballroom |
| 3:00 pm - 3:15 pm | <i>Break (beverages and treats)</i> | | | Aviary Foyer | |

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|-------------------------------------|---|----------------|------------------------------|---|-------------------------------------|
| Tuesday, March 9 (continued) | | | | | |
| 3:15 pm - 4:30 pm | WG Conform. Tests C57.13.2 | IT | V. Khalin | 40 CL | Boardroom East |
| 3:15 pm - 4:30 pm | TF Frequency Response Analysis (FRA) Guide | PCS | R. James | 40 CL O | Boardroom West |
| 3:15 pm - 4:30 pm | TF Standardization of Bulk-type Bushings (new) | Bush | R. Williams/ B. Hartgrove | 60 CL | Cockatoo |
| 3:15 pm - 4:30 pm | WG Voltage Step Regulators C57.15 | Dist | C. Colopy/ G. Kennedy | 80 CL P | Toucan |
| 3:15 pm - 4:30 pm | WG Revision to Impulse Tests | DiTests | P. Riffon | 100 CL O | Macaw |
| 3:15 pm - 4:30 pm | WG Monitoring of Transformers C57.143 | Power | D. Chu/A. Lux | 150 CL S3, P | Kon Tiki Ballroom |
| 4:30 pm - 4:45 pm | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 4:45 pm - 6:00 pm | Presentation #3: "Seismic Design Considerations for Transformers", by H. Matt, D. Ostrom, C. Riker ** | | Sponsor: Power | 150 TH S3, P (add podium and lapel mic) | Rousseau Center (first floor) |
| 4:45 pm - 6:00 pm | Presentation #4: "Moisture Estimation in Transformer Insulation", by T. Oommen, J. Thompson, B. Ward ** | | Sponsor: IF | 150 CL S3, P (add podium and lapel mic) | Kon Tiki Ballroom (second floor) |
| 6:30 pm - 9:00 pm | Technical Tour #2: <u>SDG&E Electric Distribution Operations Center</u> . Includes an informal light pizza dinner. -- Non-restricted tour (everyone is invited, but limited to 45 attendees). Advance registration is necessary. -- <u>One bus</u> will leave from the front of the Catamaran at 6:30 pm. Return to hotel around 9:00 pm. | | | | |

Wednesday, March 10 -- Wednesday Breaks Sponsored by Luxtron Corporation

| | | | | | |
|---------------------|---|---------|----------------------|---------------|-------------------------------|
| | No Meeting Registration, No Companion Tours | | | | |
| 7:00 am - 8:00 am | Breakfast - Attendees (no companions please) | | | 200 RT (flow) | Multipurpose Rm |
| 8:00 am - 9:00 am | Breakfast - Companions | | | 75 RT | Rousseau Center |
| 7:05 am - 7:50 am | WG Web-page Development <u>Breakfast Meeting</u> -- Open meeting (anyone may attend). -- At least one representative from <u>each SC</u> should attend. Food will be outside room at 7:00 am. Please be ready for a 7:05 am meeting start. | | S. McNelly | 40 CL | Rousseau E/W (first floor) |
| 8:00 am - 9:15 am | EL&P Delegation -- Users only meeting | ++ | C. Niemann | 40 HS | Boardroom E/W |
| 8:00 am - 9:15 am | SC Audible Sound & Vibration | ASV | J. Puri | 60 CL O | Toucan |
| 8:00 am - 9:15 am | SC Instrument Transformer | IT | J. Smith | 150 CL O S3 | Macaw/Cockatoo |
| 8:00 am - 9:15 am | SC Insulation Life | IL | D. Platts | 200 CL S3 | Kon Tiki Ballroom |
| 9:15 am - 9:30 am | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 9:30 am - 10:45 am | WG Phase-shift Trans. Guide C57.135 | Power | T. Lundquist | 150 CL O | Macaw/Cockatoo |
| 9:30 am - 10:45 am | SC UG Transf. & Network Protectors | UTNP | C. Niemann | 40 HS | Boardroom E/W |
| 9:30 am - 10:45 am | SC Dielectric Tests | DiTests | L. Wagenaar | 200 CL S3, O | Kon Tiki Ballroom |
| 10:45 am - 11:00 am | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 11:00 am - 12:15 pm | WG Metric Conversion PC57.144 | Dist | T. Olson | 60 CL, P | Toucan |
| 11:00 am - 12:15 pm | SC Insulating Fluids | IF | F. Gryszkiewicz | 150 CL O S3 | Macaw/Cockatoo |
| 11:00 am - 12:15 pm | SC Performance Characteristics | PCS | R. Girgis | 200 CL S3, P | Kon Tiki Ballroom |
| 12:15 pm - 1:30 pm | Lunch (open) | | | Aviary Foyer | |
| 1:30 pm - 2:45 pm | WG 1-ph Submersible Distribution Transformers C57.12.23 | Dist | A. Traut/ B. Basu | 60 CL O | Toucan |
| 1:30 pm - 2:45 pm | SC Dry Type | Dry | C. Johnson | 150 CL O S3 | Macaw/Cockatoo |
| 1:30 pm - 2:45 pm | SC Power Transformers | Power | E. Hager | 200 CL S3 P | Kon Tiki Ballroom |
| 2:45 pm - 3:00 pm | <i>Break (beverages and treats)</i> | | | Aviary Foyer | |

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|--|---|----------------|-----------------------|------------------------|---------------------|
| Wednesday, March 10 (continued) | | | | | |
| 3:00 pm - 4:15 pm | IEC TC-14 Technical Advisory Group | ++ | P. Hopkinson | 40 HS P | Boardroom E/W |
| 3:00 pm - 4:15 pm | SC Meetings Planning | Mtgs | G. Anderson | 60 CL P | Toucan |
| 3:00 pm - 4:15 pm | SC Distribution Transformers | Dist | E. Smith | 150 CL O S3 | Macaw/Cockatoo |
| 3:00 pm - 4:15 pm | SC Bushings | Bush | F. Elliott | 200 CL S3, O | Kon Tiki Ballroom |
| 4:15 pm - 4:30 pm | <i>Break (beverages only)</i> | | | Aviary Foyer | |
| 4:30 pm - 5:30 pm | SC Transformer Standards | Stds | B. Chiu | 200 CL S3, P | Kon Tiki Ballroom |
| 6:30 pm - 9:00 pm | Dinner Social -- "Cruise of Mission Bay on the William D. Evans", entertainment, dancing, and a sit-down buffet dinner. Advance registration is necessary. -- Begin boarding from the hotel pier at 6:30 pm. Boat will depart at 7:00 pm and return at 9:00 pm. -- <u>IMPORTANT</u> : Show your ticket as you board the boat. | | | | |

Thursday, March 11 -- Thursday Committee Break Sponsored by ABB, Inc. **

| | | | | | |
|-----------------------|---|--|-------------|---|-------------------|
| | No Meeting Registration, No Companion Tours, No ASC C57 Meeting, <u>No Technical Tour</u> | | | | |
| 7:00 am - 8:00 am | Breakfast - Attendees (no companions please) | | | 200 RT (flow) | Multifunction Rm |
| 8:00 am - 9:00 am | Breakfast - Companions | | | 75 RT | Rousseau Center |
| 8:00 am - 9:45 am > | Transformers Committee -- <u>All attendees</u> are encouraged to attend. | | K. Hanus | 275 CL S1, P <u>elevat.</u> table for 4 lectern w/mic, one floor mic in each isle | Kon Tiki Ballroom |
| 9:45 am - 10:00 am | <i>Break (beverages only)</i> | | | Kon Tiki Foyer | |
| > 10:00 am - 12:00 pm | Transformers Committee | | K. Hanus | 275 CL S1, P | Kon Tiki Ballroom |
| 1:00 pm - 5:00 pm > | EPRI Generation Switchyards Task Force ++ -- closed meeting, EPRI members only | | B. Ward | 30 HS beverages in back of room and only screen, cart and power strip | Boardroom E/W |
| 1:00 pm - 5:00 pm > | NEMA ST-1/ST-20 Revision ++ | | G. Morehart | 30 HS beverages in back of room and only screen, cart and power strip | Toucan |

Friday, March 12

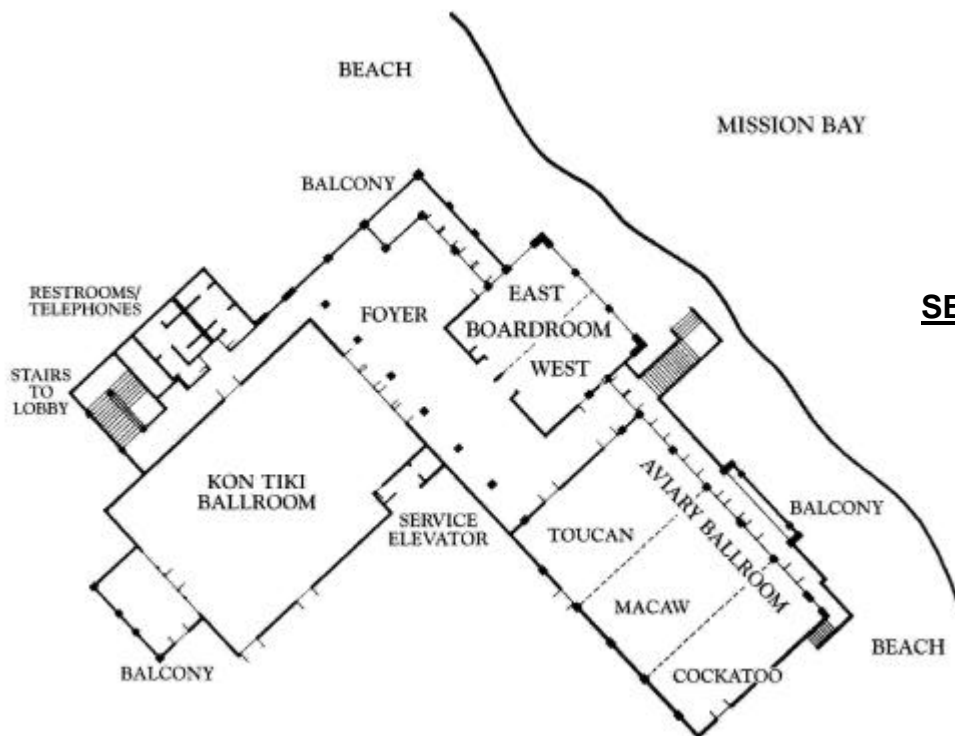
No Meetings or Events

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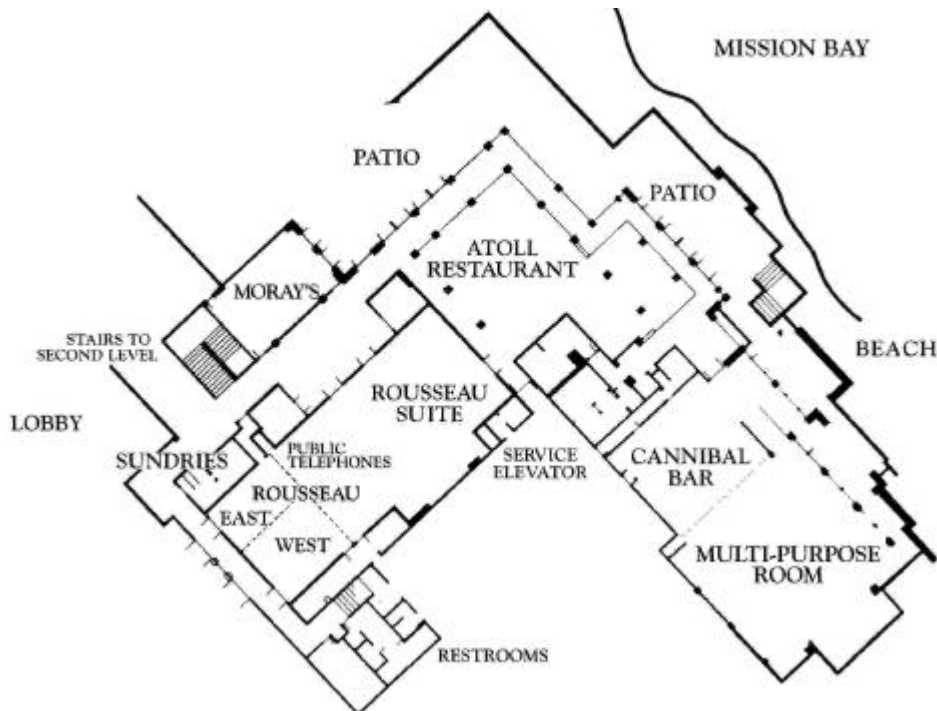
CATAMARAN RESORT HOTEL

Catamaran Resort Hotel San Diego, California, USA

NOTE: Attendee Breakfasts and Companion Breakfasts are held on the first floor of the hotel.



SECOND FLOOR



FIRST FLOOR