Fifth Annual RCS Range Certification Meeting

June 19 - 21, 2001

National Institute of Standards and Technology Boulder, Colorado

Sponsored by the

Naval Air Warfare Center Aircraft Division

Naval Air Warfare Center Weapons Division

National Institute of Standards and Technology (Boulder Laboratory)

PURPOSE

To share with the RCS Community progress related to the RCS measurement range certification program, including the conclusion of the DoD Demonstration Program, and initial industry certification reviews.

LOCATION

The meeting will be held at the National Institute of Standards and Technology (NIST), Radio Building, Main Auditorium, 325 Broadway, Boulder, Colorado.

REGISTRATION

The registration fee of \$250 per person includes workshop materials, two lunches at The Broker Inn Hotel on Tuesday & Wednesday, 19 & 20 June 2001, and coffee breaks. Refreshments will be provided during morning, mid-morning, and mid-afternoon breaks.

The enclosed registration form must be received by **June 5**, **2001**, for your name to appear on the preliminary participant's list. All requests for cancellation and refund must be submitted in writing prior to **June 5**, **2001**.

Registration can be processed electronically by visiting the NIST website: http://www.boulder.nist.gov/blconf.htm

AGENDA Tuesday, June 19

Keynote Address: VADM Joseph Dyer, Commander, Naval Air Systems Command (Invited)

SESSION I (a.m.) – **DoD Progress Reports** – We will report on the progress of the last of three DoD ranges passing through the certification process, and provide updates from the two that completed the process last year. Participants from those facilities will summarize their achievements and future plans.

Panel Discussion: If we had to do it over again.

Lunch provided at The Broker Inn Hotel

SESSION II (p.m.) – **Industry Progress Reports** – We will report on the progress of the first two industry ranges passing through the certification process, and provide updates from others preparing for certification. Participants from those facilities will summarize their achievements and future plans.

Panel Discussion: Are we happy with the results?

Wednesday, June 20

SESSION III (a.m.) – Range Characterization – We will discuss calibration and measurement procedures and issues, plus approaches, results and interpretation of the inter-range comparison studies, and the current and future needs of the ongoing inter-range comparison programs. Data analysis procedures and special diagnostic techniques will also be covered.

Lunch provided at The Broker Inn Hotel.

SESSION IV (p.m.) RCS Standards and the Certification Process – We will briefly outline the Certification process, reflecting real-world experiences, plus examine the migration from ISO 25 to ISO 17025. The adoption of a common Proprietary Information Agreement/Non-Disclosure Agreement (PIA/NDA) will be debated. A CD-ROM with Certification Program Documents will be distributed at the meeting.

Group Dinner: Location to be announced. Pay as you go.

Thursday, June 21

RCS UNCERTAINTY WORKSHOP (a.m.) - RCS Uncertainty Analysis

We will discuss aspects of RCS uncertainty analysis. General approaches as well as specific examples of determination of RCS measurement and calibration uncertainties will be presented. Recommendation for future studies by the RCS community to improve uncertainty procedures will be sought.

RANGE COMMANDERS COUNCIL (p.m.) – Signature Measurements Standards Group Radar Committee Business Meeting – Members and Associates Only.

REGISTER FOR CONFERENCE

Please complete attached registration form and return by June 5, 2001, to:

NIST/Finance Division 100 Bureau Drive, Stop 3751 Administrative Building (101) Room A822 Gaithersburg, MD 20899-3751 or

Fax to: Carrie Hart (301) 975-8943

or register online at:

http://www.boulder.nist.gov/blconf.htm

REGISTRATION CONTACT

Wendy Ortega-Henderson NIST Public and Business Affairs Div. 346 325 Broadway Boulder, CO 80305 Telephone: (303) 497-3693

Fax: (303) 497-6957

Email: ortegaw@boulder.nist.gov

TECHNICAL CONTACTS

Roger W. Davis EG&G Technical Services, Inc. 23226 Holly Hill Lane. California, MD 20619-6121 Telephone: (301) 863-0443 Email: rogerdavis@cc-link.com

Andy Repjar NIST Radio Frequency Technology Div. 813.02 325 Broadway Boulder, CO 80305

Telephone: (303) 497-5703 Email: repjar@boulder.nist.gov

SECURITY

Secret Security Clearance and Visit Request are required for attendance, though the conference will be held at the UNCLASSIFIED level. Please send clearances to:

Wendy Monroe U.S. Department of Commerce Mountain Region Security Office, MC 44 325 Broadway Boulder, CO 80305 Telephone: (303) 497-5198 or

Fax to: (303) 497-4989

CALL FOR PAPERS

We are soliciting presentation proposals or paper abstracts relating to the certification of Radar Cross Section measurement facilities. Topics should be limited to areas directly related to <u>certification</u>, and which might include:

- the certification process or procedures
- lessons learned preparing for or participating in a certification effort
- from a range perspective, or
- from a prospective range perspective, or
- from a reviewer's perspective
- there is <u>particular interest</u> in details relating to <u>costs</u>, <u>benefits</u>, and <u>impacts</u>
- uncertainty analysis, including methodologies, applications, and anomalies
- calibrations, including methodologies, applications, and anomalies
- ISO 25 / ISO 17025
- reports of measurement related to supporting certification
- inter-facility or inter-range comparisons
- other areas that impinge upon the certification topic

ABSTRACT SUBMISSION

Initial responses should include a brief description of the topic (nominally 2 paragraphs) that includes a statement about the relevance of the topic to the certification of RCS measurement facilities. **DEADLINE EXTENDED**: Initial responses are due by **18 May 2001** via e-mail to rogerdavis@cc-link.com, with cc: to e.vedeler@larc.nasa.gov and Ilmandeville@west.raytheon.com, or via regular mail to:

Roger Davis EG&G Technical Services, Inc. (Consultant) 23226 Holly Hill Lane California, MD 20619-6121 USA

Authors of those papers/presentations accepted for inclusion will be notified by **23 May 2001**, with final papers/presentations due **11 June 2001**.

REGISTRATION FORM RCS RANGE CERTIFICATION MEETING JUNE 19 – 21, 2001

Type in the information below, print, sign, and mail or FAX by 5 June 2001:

Mail NIST/Finance Division

100 Bureau Drive, Stop 3751

Administrative Building (101) Room A822

Gaithersburg, MD 20899-3751 **FAX** Carrie Hart at (301) 975-8943

Online http://www.boulder.nist.gov/blconf.htm

last name:
first name:
organization:
address:
room or mail code:
city, state, zip:
country:
telephone:
facsimile:
email:
Are handicap services needed?
Check enclosed, payable to: NIST/RCS Range Certification Meeting
Checks from outside the U.S.A. should be written on a U.S.A. bank.
MasterCard VISA Discover American Express
Card No.:
Expiration Date:
Authorized Signature:
Purchase Order No. / Training Form:

Requests for cancellation and refund must be received in writing **by June 5**, **2001** The information provided in this registration form will be used for the following purposes: to process your payment, to create a conference name badge, to publish in a participant's list for this conference, and to compile mailing lists for future conferences.

Please check here if you do not want your information published in the participant's list or conference mailing list.

ACCOMMODATIONS

A limited number of rooms are being held at the hotels listed below. Reservations should be made early to ensure space availability. Be sure to mention that you are attending the **RCS Certification Meeting** at NIST/Boulder. Guaranteed late arrival deposits are suggested for check-in after 4:00 p.m. If you wish to cancel, give the hotel 24 hours notice to avoid charges.

The Broker Inn Hotel 555 30th St. Boulder, CO 303-444-3330, 1-800-338-5407 Rate: 90 single/double + 9.6% tax

Best Western Boulder Inn 770 28th St. Boulder

303-449-3800, 1-800-233-8469

Rate: \$89 single (queen beds) + 9.6% tax

Ramada Inn (formerly Holiday Inn) 800 28th St. Boulder, CO 303-443-3322, 1-800-542-0304

Rate: \$90 single/double + 9.6% tax

For a list of additional hotels, visit the NIST website at www.boulder.nist.gov/hotels

TRANSPORTATION

Boulder is located about 50 miles northwest of Denver International Airport (DIA). Transportation to and from Boulder is available by rental car, limousine, or bus. Most rental car companies have facilities at DIA.

The Super Shuttle Boulder (303- 227-2000), a limousine shuttle, leaves DIA every hour on the hour arriving at Boulder hotels/motels in approximately 70 minutes. The one-way fare to most hotels is \$18. Reservations are suggested. Shuttle service runs from 6 a.m. to 9 p.m. daily.

A regional bus service, the RTD, provides transportation between DIA and Boulder. Buses leave every half hour to an hour depending on the time of day. The buses run between 7:10 a.m. and 12:40 a.m. Trip time is about 90 minutes, with a final stop at the Boulder bus station. The one-way fare is \$8.

All hotels/motels are within walking distance of the National Institute of Standards and Technology. Local Boulder taxi service is also available. Call 303-442-2277.

DRIVING DIRECTIONS

As you leave the Denver airport, continue on Pena Blvd. to I-70. Proceed west to a sign for I-270 (next right). Stay on I-270. It will become US-36 West. You should stay in the left hand travel lane. Once you are on US-36, it will be about a 30-minute ride to Boulder and the Baseline Road exit. Turn left at Baseline, proceed to the first traffic light (27th Way), turn left, and proceed across Broadway into the Department of Commerce. You may park anywhere on the NIST site, including the visitor parking lot which is located at the corner of Millikan Road and Compton Road.

BOULDER VISITOR INFORMATION AND MAPS

Please visit our Website at:

http://www.boulder.nist.gov/visitor-info.htm

Maps are available at our website at:

http://www.boulder.nist.gov/maps.htm

WORLD WIDE WEB ADDRESS

http://www.nist.gov/public_affairs/confpage/010619b.htm

KEYNOTE SPEAKER

Our Keynote Speaker is not confirmed. VADM Joe Dyer, Commander, Naval Air Systems Command has been invited, and has expressed interest in supporting the conference, however, he has not yet confirmed.