

AUTHOR INDEX

Johns Hopkins APL Technical Digest
Volume 18 (1997)

- Abita JL, see Sadowsky J
Aylor RP, see Sadowsky J
Barney GA, see Sadowsky J
Benson RC, see Bryden WA
———, see Murphy JC
Benson RC, and Wagner JW, The Johns Hopkins University/
Army Research Laboratory microelectronics research col-
laborative program 18(2), 309–314.
Biermann PJ, see Halpin JP
Bitman WR, Balancing software composition and inheritance
to improve reusability, cost, and error rate 18(4), 485–500.
Bohandy J, see Sadowsky J
Bric AJ, Imaging a BQM-74E target drone using coherent radar
cross section measurements 18(3), 365–376.
Bryden WA, Benson RC, Ko HW, and Donlon M, Universal
agent sensor for counterproliferation applications 18(2),
302–308.
Bythrow PF, Aerobatics: Sport, science, and survival 18(1),
141–151.
Bzhelyansky A, see Murray GM
Carkhuff BG, see Sadowsky J
Casasnovas A, and White JW, Commercial plastic encapsulated
microcircuits for naval aviation applications 18(1), 50–58.
Cauwenberghs G, see Pineda FJ
Chalmers RW, see Coon AC
Chamlou R, see Maurer DE
Christens-Barry WA, and Partin AW, Quantitative grading of
tissue and nuclei in prostate cancer for prognosis prediction
18(2), 226–233.
Chrystomou AK, see Pollack AF
Coon AC, Spatial correlation of detections for impulsive echo
ranging sonar 18(1), 105–112.
Coon AC, Ross CA, Chalmers RW, and Gallati PC, The
extended echo ranging aural and visual support trainer
18(1), 113–124.
Donlon M, see Bryden WA
Donohue DJ, Ku HC, Thompson DR, and Sadowsky J, Direct
numerical simulation of electromagnetic rough surface and
sea scattering by an improved banded matrix iterative
method 18(2), 204–216.
Donohue DJ, and Kuttler JR, Modeling radar propagation over
terrain, 18(2), 279–287.
Dubbel DC, see Murphy JC
Ecelberger SA, see Wickenden DK
Edwards RT, see Pineda FJ
Ferguson RC, see Pollack AF
Foard TR, Changes in naval aviation: Guest Editor's introduc-
tion 18(1), 2–5.
Fong E, and Kay SW, The Mark 92 Modification 6 fire control
system and APL's coherent radar data program 18(3), 398–
406.
Franson JD, and Jacobs BC, Quantum computing 18(2), 188–
192.
Gallati PC, see Coon AC
Garritson GR, see Sullins GA
Gearhart SA, and Vogel KK, Infrared system test and evaluation
at APL 18(3), 448–459.
Genovese KO, see Maurer DE
Givens RB, see Wickenden DK
Gravlin ES, see Waltrup PJ
Griffith DC, Phase error compensation technique for improved
synthetic aperture radar performance 18(3), 358–364.
———, see Ousborne JJ
Guier WH, and Weiffenbach GC, Genesis of satellite navigation
18(2), 178–181.
Hall M, and McNamee JP, Improving software performance with
automatic memoization 18(2), 254–260.
Halpin JP, Pandolfini PP, Biermann PJ, Kistenmacher TJ, Hunter
LW, O'Connor JS, and Jablonski DG, F/A-18 E/F program
independent analysis 18(1), 33–49.
Hanson JM, see Marcotte FJ
Hanson JM, and Marcotte FJ, Aircraft wake vortex detection
using continuous-wave radar 18(3), 348–357.
Huang Z, see Wickenden DK
Hunter LW, see Halpin JP
Immer EA, see Semmel RD
Jablonski DG, see Halpin JP
Jacobs BC, see Franson JD
Jenkins AL, see Murray GM
Josephson KL, see Sadowsky J
Kay SW, see Fong E
Kennedy LD, Patterson CR, and Munshower DC, F/A-18 elec-
tronic warfare suite cost and operational effectiveness analysis
methodology: Phase 1—Radio-frequency countermeasures
18(1), 59–68.
Kistenmacher TJ, see Halpin JP
———, see Wickenden DK
Klem BA, see Sadowsky J
Ko HW, see Bryden WA
Krill JA, see Zinger WH
Ku HC, see Donohue DJ
Kues HA, Mazik PE, and Monahan JC, Microwave exposure:
Safeguarding public health in the absence of national
standards 18(2), 288–294.
Kuttler JR, see Donohue DJ
Lin CC, and Reilly JP, A site-specific model of radar terrain
backscatter and shadowing 18(3), 432–447.
Maier-Tyler LL, Awards for publications and research and devel-
opment 18(1), 152–155.
Marcotte FJ, see Hanson JM
Marcotte FJ, and Hanson JM, An airborne captive seeker with
real-time analysis capability 18(3), 422–431.
Maurer DE, Chamlou R, and Genovese KO, Signal processing
algorithms for electronic combat receiver applications 18(1),
69–78.
Mazik PE, see Kues HA
McNamee JP, see Hall M
Menner WA, The Navy's tactical aircraft strike planning process
18(1), 90–104.
Mobley SJ, see Sadowsky J
Monahan JC, see Kues HA
Morris EB, see Sadowsky J
Mott DB, see Wickenden DK
Munshower DC, see Kennedy LD
Murphy JC, see Wickenden DK
Murphy JC, Dubbel DC, and Benson RC, The Securities Tech-
nology Institute for counterfeit deterrence 18(2), 295–301.
Murray GM, Jenkins AL, Bzhelyansky A, and Uy OM, Molecu-
larly imprinted polymers for the selective sequestering and
sensing of ions 18(4), 464–472.

- Najmi AH, and Sadowsky J, The continuous wavelet transform and variable resolution time–frequency analysis 18(1), 134–140.
- O'Connor JS, see Halpin JP
- Osiander R, see Wickenden DK
- Ott E, see Sommerer JC
- Ousborne JJ, Griffith D, and Yuan RW, A periscope detection radar 18(1), 125–133.
- Pandolfini PP, see Halpin JP
- Partin AW, see Christens-Barry WA
- Patterson CR, see Kennedy LD
- Pineda FJ, Cauwenberghs G, Edwards RT, Ryals KT, and Steigerwald DG, Bang, click, thud, or whack? 18(2), 244–253.
- Pollack AF, Ferguson RC, and Chrysostomou AK, Tomahawk deconfliction: An exercise in system engineering 18(1), 79–89.
- Reilly JP, see Lin CC
- Rider JF, see Sadowsky J
- Ross CA, see Coon AC
- Roulette JF, see Rzemien R
- Roulette JF, and Skrivseth KA, Coherent data collection and analysis capability for the AN/SPS-48E radar 18(3), 388–397.
- Ryals KT, see Pineda FJ
- Rzemien R, Coherent data collectors: A hardware perspective 18(3), 377–387.
- , Coherent radar: Guest Editor's introduction 18(3), 344–347.
- Rzemien R, and Roulette JF, Coherent data collection efforts in support of Phalanx 18(3), 407–421.
- Sadowsky J, see Donohue DJ
- , see Najmi AH
- Sadowsky J, Abita JL, Aylor RP, Barney GA, Bohandy J, Carkhuff BG, Josephson KL, Klem BA, Mobley SJ, Morris EB, Rider JF, Schneider W, Stanford RL, and Wilderson SF, Safer transit travel for the blind using an infrared warning system 18(2), 315–323.
- Schneider W, see Sadowsky J
- Semmel RD, Immer EA, Silberberg DP, and Winkler RP, Knowledge-based query formulation for integrated information systems 18(2), 261–270.
- Semmel RD, and Westgate CR, Responding to critical educational needs: Information systems and technology 18(2), 329–332.
- Shu PK, see Wickenden DK
- Silberberg DP, see Semmel RD
- Skrivereth KA, see Roulette JF
- Sommerer JC, Milton S. Eisenhower Research and Technology Development Center 50th Anniversary issue: Guest Editor's introduction 18(2), 165–172.
- Sommerer JC, Ott E, and Tél T, Modeling two-dimensional fluid flows with chaos theory 18(2), 193–203.
- Spall JC, System understanding and statistical uncertainty bounds from limited test data 18(4), 473–484.
- Stanford RL, see Sadowsky J
- Steidle CE, The Joint Strike Fighter Program 18(1), 6–20.
- Steigerwald DG, see Pineda FJ
- Sullins GA, Waltrup PJ, and Garrison GR, The APL alliances for high-speed aerothermal and propulsion testing 18(2), 324–328.
- Tél T, see Sommerer JC
- Thompson DR, see Donohue DJ
- Uy OM, see Murray GM
- Van Allen JA, My life at APL 18(2), 173–177.
- Vogel KK, see Gearhart SA
- Wagner JW, see Benson RC
- Waltrup PJ, see Sullins GA
- Waltrup PJ, White ME, Zarlingo F, and Gravlin ES, History of ramjet and scramjet propulsion development for U.S. Navy missiles 18(2), 234–243.
- Weiffenbach GC, see Guier WH
- Westgate CR, see Semmel RD
- White JW, Application of new management concepts to the development of F/A-18 aircraft 18(1), 21–32.
- , see Casanovas A
- White ME, see Waltrup PJ
- Wickenden DK, Huang Z, Mott DB, and Shu PK, Development of gallium nitride photoconductive detectors 18(2), 217–225.
- Wickenden DK, Kistenmacher TJ, Osiander R, Ecelberger SA, Givens RB, and Murphy JC, Development of miniature magnetometers 18(2), 271–278.
- Wilderson SF, see Sadowsky J
- Williams DJ, Early energetic particle results from Jupiter 18(2), 182–187.
- Winkler RP, see Semmel RD
- Yuan RW, see Ousborne JJ
- Zarlingo F, see Waltrup PJ
- Zinger WH, and Krill JA, Mountain Top: Beyond-the-horizon cruise missile defense 18(4), 501–520.

SUBJECT INDEX

Johns Hopkins APL Technical Digest
Volume 18 (1997)

APL AWARDS

Awards for publications and research and development 18(1), 152–155. Maier-Tyler LL

COHERENT RADAR

A site-specific model of radar terrain backscatter and shadowing 18(3), 432–447. Lin CC, and Reilly JP

Aircraft wake vortex detection using continuous-wave radar 18(3), 348–357. Hanson JM, and Marcotte FJ

An airborne captive seeker with real-time analysis capability 18(3), 422–431. Marcotte FJ, and Hanson JM

Coherent data collection and analysis capability for the AN/SPS-48E radar 18(3), 388–397. Roulette JF, and Skrivereth KA

Coherent data collection efforts in support of Phalanx 18(3), 407–421. Rzemien R, and Roulette JF

Coherent data collectors: A hardware perspective 18(3), 377–387. Rzemien R

Coherent radar: Guest Editor's introduction 18(3), 344–347. Rzemien R

Imaging a BQM-74E target drone using coherent radar cross section measurements 18(3), 365–376. Bric AJ
Phase error compensation technique for improved synthetic aperture radar performance 18(3), 358–364. Griffith DC
The Mark 92 Modification 6 fire control system and APL's coherent radar data program 18(3), 398–406. Fong E, and Kay SW

EDUCATION

Responding to critical educational needs: Information systems and technology 18(2), 329–332. Semmel RD, and Westgate CR

HISTORY

Genesis of satellite navigation 18(2), 178–181. Guier WH, and Weiffenbach GC
Milton S. Eisenhower Research and Technology Development Center 50th Anniversary issue: Guest Editor's introduction 18(2), 165–172. Sommerer JC
My life at APL 18(2), 173–177. Van Allen JA

INFORMATION TECHNOLOGY

Balancing software composition and inheritance to improve reusability, cost, and error rate 18(4), 485–500. Bitman WR

NAVAL AVIATION

A periscope detection radar 18(1), 125–133. Osborne JJ, Griffith D, and Yuan RW
Application of new management concepts to the development of F/A-18 aircraft 18(1), 21–32. White JW
Changes in naval aviation: Guest Editor's introduction 18(1), 2–5. Foard TR
Commercial plastic encapsulated microcircuits for naval aviation applications 18(1), 50–58. Casanovas A, and White JW
F/A-18 E/F program independent analysis 18(1), 33–49. Halpin JP, Pandolfini PP, Biermann PJ, Kistenmacher TJ, Hunter LW, O'Connor JS, and Jablonski DG
F/A-18 electronic warfare suite cost and operational effectiveness analysis methodology: Phase 1—Radio-frequency countermeasures 18(1), 59–68. Kennedy LD, Patterson CR, and Munshower DC
Signal processing algorithms for electronic combat receiver applications 18(1), 69–78. Maurer DE, Chamlou R, and Genovese KO
Spatial correlation of detections for impulsive echo ranging sonar 18(1), 105–112. Coon AC
The extended echo ranging aural and visual support trainer 18(1), 113–124. Coon AC, Ross CA, Chalmers RW, and Gallati PC
The Joint Strike Fighter Program 18(1), 6–20. Steidle CE
The Navy's tactical aircraft strike planning process 18(1), 90–104. Menner WA
Tomahawk deconfliction: An exercise in system engineering 18(1), 79–89. Pollack AF, Ferguson RC, and Chrysostomou AK

PROGRAMS

Safer transit travel for the blind using an infrared warning system 18(2), 315–323. Sadowsky J, Abita JL, Aylor RP, Barney GA, Bohandy J, Carkhuff BG, Josephson KL, Klem BA, Mobley SJ, Morris EB, Rider JF, Schneider W, Stanford RL, and Wilderson SF
The APL alliances for high-speed aerothermal and propulsion testing 18(2), 324–328. Sullins GA, Waltrup PJ, and Garritson GR
The Johns Hopkins University/Army Research Laboratory microelectronics research collaborative program 18(2), 309–314. Benson RC, and Wagner JW
The Securities Technology Institute for counterfeit deterrence 18(2), 295–301. Murphy JC, Dubbel DC, and Benson RC
Universal agent sensor for counterproliferation applications 18(2), 302–308. Bryden WA, Benson RC, Ko HW, and Donlon M

PUBLICATIONS, PRESENTATIONS, AND COLLOQUIA

Publications, presentations, and colloquia 18(1), 156–162.
Publications, presentations, and colloquia 18(2), 333–341.
Publications, presentations, and colloquia 18(3), 460–462.
Publications, presentations, and colloquia 18(4), 521–526.

RESEARCH

Development of gallium nitride photoconductive detectors 18(2), 217–225. Wickenden DK, Huang Z, Mott DB, and Shu PK
Direct numerical simulation of electromagnetic rough surface and sea scattering by an improved banded matrix iterative method 18(2), 204–216. Donohue DJ, Ku HC, Thompson DR, and Sadowsky J
Early energetic particle results from Jupiter 18(2), 182–187. Williams DJ
Modeling two-dimensional fluid flows with chaos theory 18(2), 193–203. Sommerer JC, Ott E, and Tél T
Molecularly imprinted polymers for the selective sequestering and sensing of ions 18(4), 464–472. Murray GM, Jenkins AL, Bzhelyansky A, and Uy OM
Quantitative grading of tissue and nuclei in prostate cancer for prognosis prediction 18(2), 226–233. Christens-Barry WA, and Partin AW
Quantum computing 18(2), 188–192. Franson JD, and Jacobs BC
The continuous wavelet transform and variable resolution time–frequency analysis 18(1), 134–140. Najmi AH, and Sadowsky J

SYSTEM TEST AND EVALUATION

Infrared system test and evaluation at APL 18(3), 448–459. Gearhart SA, and Vogel KK
System understanding and statistical uncertainty bounds from limited test data 18(4), 473–484. Spall JC

TECHNOLOGY DEMONSTRATION

Mountain Top: Beyond-the-horizon cruise missile defense 18(4), 501–520. Zinger WH, and Krill JA

TECHNOLOGY DEVELOPMENT

Bang, click, thud, or whack? 18(2), 244–253. Pineda FJ, Cauwenberghs G, Edwards RT, Ryals KT, and Steigerwald DG
Development of miniature magnetometers 18(2), 271–278. Wickenden DK, Kistenmacher TJ, Osiander R, Ecelberger SA, Givens RB, and Murphy JC
History of ramjet and scramjet propulsion development for U.S. Navy missiles 18(2), 234–243. Waltrup PJ, White ME, Zarlingo F, and Gravlin ES
Improving software performance with automatic memoization 18(2), 254–260. Hall M, and McNamee JP
Knowledge-based query formulation for integrated information systems 18(2), 261–270. Semmel RD, Immer EA, Silberberg DP, and Winkler RP
Microwave exposure: Safeguarding public health in the absence of national standards 18(2), 288–294. Kues HA, Mazik PE, and Monahan JC
Modeling radar propagation over terrain 18(2), 279–287. Donohue DJ, and Kuttler JR

OTHER TOPICS

Aerobatics: Sport, science, and survival 18(1), 141–151. Bythrow PF
Patents 18(4), 526.