

INTERNATIONAL DEVICES & DIAGNOSTICS MONITOR

Vol. 4, No. 4
Jan. 22, 2018

IN THIS ISSUE

MHRA launches new online service for medical device submissions...Page 2

CDRH commits to 3-year goal to bring novel devices to the US first.....Page 3

FDA and DoD unveil medical product program for militaryPage 4

CDRH proposes to clarify all appeal decisions are 'significant'Page 5

GAO calls on FDA to develop performance metrics for least burdensome requirementsPage 6

Flu season impacts IV product shortage.....Page 7

Approvals: Medtronic clinician programmer for implantable pump wins FDA approval ... FDA clears Masimo pulse oximeter device ... Hologic breast biopsy system gets CE Mark ... Cepheid achieves FDA clearance and CLIA waiver for flu assay.....Page 7

IRS Decides Not to Impose Penalties On Medical Device Excise Tax through Q4 2018

The U.S. Internal Revenue Service and the Department of Treasury will not impose penalties on devicemakers liable for the Affordable Care Act's medical device excise tax until Q4 2018.

The widely unpopular 2.3 percent excise tax, enacted in 2013 as a mechanism to pay for ACA provisions, later received a two-year moratorium under the Consolidated Appropriations Act of 2016. The temporary suspension was lifted and the tax came back into effect Jan. 1, to the dismay of many U.S. producers who say it hinders innovation efforts and job creation.

Prior to the joint decision to provide deposit penalty relief, devicemakers were given only a couple of weeks to prepare to make the excise tax payments for certain medical devices by Jan. 29, with the first deposit covering the first 15 days of the month.

*(See **Tax**, Page 2)*

CFDA Issues Guidelines For Using Foreign Device Trial Data

China FDA released technical guidelines for accepting clinical trial data for device trials conducted overseas, in a move to reduce duplication of trials and help speed approvals.

Devicemakers wanting to export devices to China may not have to conduct additional local clinical trials. Previously, overseas devicemakers had to conduct an additional clinical trial in China even if multicenter trials included ethnic Chinese patients in the studies.

The guidelines are intended to accelerate and simplify the approval process, said Katherine Wang, partner at law firm Ropes & Gray in Shanghai. The change is good news for devicemakers as it provides an opportunity to reduce the time to market, Wang said.

“Foreign study data can be used to support regulatory submissions with the CFDA, but the CFDA may ask for study data on Chinese

*(See **CFDA**, Page 4)*

MRHA Launches New Online Service For Medical Device Submissions

The UK's Medicines & Healthcare products Regulatory Agency launched a new one-stop online service for device firms, with a requirement to begin using internationally agreed descriptors.

All existing medical device registrations will remain valid, but the new online accounts, which began being rolled out last November, will receive new account reference numbers. MHRA plans to complete the launch of all online accounts by the end of February.

Under the new system, customers have the ability to submit medical devices, including a greater number of in vitro diagnostic devices, in bulk for registration with a single fee, and can track the progress of their applications in real-time via updates sent at each stage, among other benefits.

MHRA's move to standardize the use of device terms was prompted by the need to implement the new European medical device and IVD regulations, though Brexit negotiations are ongoing.

Customers will now be required to use the Global Medical Device Nomenclature codes and terms to describe registered devices as recommended by the International Medical Device Regulators Forum (IMDRF).

Meanwhile, the FDA is also planning to update its medical device codes for harmonization with IMDRF terminology in CDRH's electronic medical device reporting system. Bernard Jee, product manager at Pilgrim Quality Solutions, which collaborated with the FDA during the development of the system's eSubmitter software, previously told *FDAnews* these updates will reduce the burden on both agency staff and industry of tracking codes across different regulators. — Ana Mulero

Tax, from Page 1

It was either pay up or face fines for failing to make the deposits.

But the IRS and the Treasury found that in “consideration of the short time frame between the end of the moratorium period and the due date of the first deposit,” penalties will not be imposed on a devicemaker who “demonstrates a good faith attempt to comply with requirements...and that the failure was not due to willful neglect,” the IRS said in a Jan. 17 notice.

“Therefore, a taxpayer may avoid penalties if it makes an affirmative showing that the failure to deposit is due to reasonable cause and not to willful neglect,” the notice said.

Devicemakers will also be allowed to use safe harbor rules, if the established criteria are met — for example, making each deposit on time — for semi-monthly payments beginning in the third quarter. And the IRS does not intend to use its authority to block the use of these rules during Q3 and Q4.

This decision provides a sigh of relief, for now. Bipartisan opposition to the tax has rapidly gained more momentum in recent months — with numerous letters to Congress not just from industry associations, but also from healthcare and research organizations as well as patient advocacy groups, urging a permanent repeal (*IDDM*, Nov. 13, 2017).

Currently, there is a deluge of legislative proposals to either permanently repeal the tax or extend another suspension. The House passed a short-term spending bill, H.R.195, Jan. 18 — with a vote of 230-197 — that includes another two-year pause on the medical device tax. If enacted, the tax would not apply to device sales during the calendar years 2018 and 2019.

Sens. Ed Markey (D-Mass.) and Elizabeth Warren (D-Mass.) reintroduced the No Taxation on Device Innovation Act (S.2287) this month, seeking a full repeal.

Last December, Rep. Erik Paulsen (R-Mo.) introduced a bill to amend the tax code by replacing the excise tax moratorium's sunset date from “2017” to “2022” (*IDDM*, Dec. 18, 2017). — Ana Mulero

CDRH Commits to 3-Year Goal to Bring Novel Devices to the U.S. First

CDRH released a three-year plan outlining three priorities to focus on: employee engagement, streamlining of processes, and building “collaborative communities.”

The plan features a single goal to measure overall success. “As a measure of success, we aim to have more than 50 percent of manufacturers of novel technologies for the U.S. market intend to bring their devices to the U.S. first or in parallel with other major markets by December 31, 2020,” said CDRH Director Jeff Shuren.

The three priorities are aimed at achieving this goal, though it is not clear how the center will assess the intention of manufacturers of novel devices.

2018-2020 Priorities

The CDRH Engage Council is charged with overseeing implementation of the first identified priority: employee engagement, opportunity, and success.

The second priority is simplicity, which means streamlining processes, and programs, as well as removing unnecessary burdens.

CDRH also plans on applying the concept of “Collaborative Communities” through efforts such as its Case for Quality initiative that engages device firms, payers, and patients, among others. As part of this approach, the center will help establish the National Evaluation System for health Technology (NEST), the a multi-million dollar project initiated in 2016 to generate real-world evidence (RWE).

For fiscal year 2018, the agency awarded the NEST Coordinating Center a five-year cooperative agreement with \$6 million in annual funding derived from user fee payments, supported in RWE commitments under the latest reauthorization of MDUFA.

To implement this priority, a cross-center Steering Committee will be created and tasked

with developing a code of conduct and best practices for Collaborative Communities.

“We will make building Collaborative Communities our standard practice,” CDRH said. The center will also “consider whether a Collaborative Community approach could be adopted across two or more countries” by using the International Medical Device Regulators Forum as a catalyst.

CDRH has already started using the three approaches. Shuren pointed to the results with efforts that are underway. For example, the number of approved novel devices seeing a four-fold increase from 29 in 2009, vs. 95 in 2017, reaching “an all-time high during the user fee era,” Shuren said (*IDDM*, Jan. 15).

2017 Highlights

In a separate report, the center said it exceeded its targets for 2017, including gaining access to 100 million electronic patient records by using device identification (result: 103 million records); an increase of 100 percent in the number of pre- and post-market regulatory decisions using RWE (result: 193 percent); and engaging with 20 patient groups since 2016 (result: 48 patient groups).

Last fall, the FDA issued final guidance encouraging the use of RWE for regulatory decision-making by providing clarifications on the factors that should be used by industry and agency staff to determine whether the real-world data collected can be used as RWE for this purpose (*IDDM*, Sept. 4, 2017).

Another 2017 target involved proposing a voluntary industry program aimed at improving product and manufacturing quality by year’s end. In December 2017, the center announced its plan to begin accepting applications for the voluntary Case for Quality Pilot Program by Jan. 2. The program is aimed at identifying best practices and enhancing resource allocation for potential cost savings with the help of no more than nine enrolled participants (*IDDM*, Jan. 8).

— Ana Mulero

FDA and DoD Unveil Medical Product Program for Military

The FDA and the Department of Defense announced a joint program Tuesday to prioritize development of medical products for deployed military personnel.

The initiative responds to DoD complaints about delays in getting urgently needed products approved for military use.

Under the program, DoD's Office of Health Affairs and the FDA will collaborate in reviewing products meant to treat, prevent or diagnose serious or life-threatening conditions for troops, and accelerate development of the products.

"Expeditious access to life-saving medical products for U.S. troops on the battlefield is part and parcel to ensuring our shared priority of operational readiness," said Tom McCaffery, DoD's acting assistant secretary of defense for health affairs.

CDER will meet at least semiannually to assess DoD's products in development and at least quarterly to discuss priorities.

The department's most important medical products currently include cryopreserved platelets, cold-stored platelets and freeze-dried plasma, all products regulated by FDA's Center for Biologics Evaluation and Research. Those products will be the initial priorities of the program.

"The FDA is fully committed to working with our federal partners in the DoD to expedite availability of medical products essential to the health of our military service members, particularly those products used to treat injuries in battlefield settings," said FDA Commissioner Scott Gottlieb.

"By standing up a collaborative program with DoD, we hope to address DoD's immediate product priorities and ensure these products are developed and made available in the most expeditious manner possible," Gottlieb said. — James Miessler

CFDA, from Page 1

patients if the foreign studies do not fully comply with China's GCPs [Good Clinical Practices] or specific technical guidelines," she said.

Foreign devicemakers wanting to bypass local trials should be sure to involve sufficient numbers of Chinese patients when organizing their clinical studies, she said.

Speed to Market

The changes represent a sea change for CFDA, because it is signaling that a local trial may not be required, said LEK Managing Director Stephen Sunderland in Shanghai.

"This could cut up to 18 months off of companies timelines for gaining approval in China," said Sunderland.

The final guidelines cover ethical and legal principles and clarify data and technical requirements for exported devices.

The registration guidelines largely cover good clinical practices for devices and in vitro

diagnostics. Any differences in GCPs should be documented and explained, CFDA said.

Clinical trials conducted abroad may not always conform with China's requirements, the agency said. CFDA is quite specific when it comes to data integrity, clinical design and protection of research subjects. For study design, applicants need to fully describe study endpoints, calculation methods and study design considerations.

Devicemakers will need to confirm that the population data studied can be extrapolated to the Chinese population. Factors that could influence differences in clinical trial data among populations include:

- Human genetic characteristics or demographics such as race, age, and gender;
- Extrinsic factors based on social environment such as dietary habits, religious beliefs, and socio-economic conditions;
- Differences in clinical trial conditions, including differences in test conditions, medical facilities, researchers' abilities, and treatment guidelines and standards.

CDRH Proposes to Clarify all Appeal Decisions are ‘Significant’

The FDA issued a proposed rule that would clarify the CDRH decision appeal process and expand the scope of what would be considered a “significant decision.”

The proposed rule would apply to section 517A of the FD&C Act, which was amended by FDASIA in 2012 specifying procedures and timeframes for internal agency supervisory reviews of significant decisions made by CDRH staff, to allow interested parties outside of the FDA to request a review of an agency employee’s “significant decision” in an appeal attempt.

It would also expand the scope of what would be considered a “significant decision” to include all other CDRH decisions as the agency intends to stop using this term and use the terms “517A decision” and “non-517A decisions” instead.

“We do not want to imply that all other decisions of the agency that do not fall within section 517A of the FD&C Act are not significant,” the agency said. “Similarly, we did not want to use the term “non-significant decision” when speaking of decisions outside of the scope of section 517A, as that might imply some unintended assessment on our part concerning the importance of these types of decisions.” The proposed regulations are also intended to prevent any confusion with distinguishing between the two categories of decisions.

These policies are consistent with the CDRH guidance released last September in a Q&A format, in which the agency avoided providing a definition of “significant decisions” and simply referred to this term by using both categories of decisions. This guidance provides information on the procedures and timeframes for the supervisory review of 517A decisions (*IDDM*, Oct. 9, 2017).

Only the following types of regulatory decisions are considered to be “517A decisions”:

- 510(k): Not substantially equivalent; Substantially equivalent;
- PMA/HDE: Not approvable; Approvable; Approval; Denial;

- Breakthrough devices: Expedited access pathway program request for breakthrough designation for devices subject to premarket notification, premarket approval, or de novo requests. Grant; Denial of request for breakthrough designation;
- IDE: Disapproval; Approval;
- Failure to reach agreement on protocol under section 520(g)(7) of the FD&C Act; and
- “Clinical Hold” determinations under section 520(g)(8) of the FD&C Act.

All other decision types, including 510(k) requests for additional information, PMA major deficiency letter, 510(k) and PMA refuse to accept letters, post-market surveillance orders as well as CLIA waiver decisions and warning letters, would be considered to be “non-517A decisions” by CDRH. The new procedural requirements for supervisory reviews of these decisions as outlined in the proposed rule are:

- A request for supervisory review of a CDRH non-517A decision should be received within 60 days after the date of the decision; and
- A request received after the 60-day time-frame “will be denied as untimely,” unless there are circumstances beyond the control of the submitter, such as a snow emergency.

For both categories of decisions, requests must be addressed at least at the next organizational level from the one in which the CDRH employee who made the decision.

The agency said it aims to “provide transparency and clarity for internal and external stakeholders on CDRH’s process for supervisory review of decisions.”

It will also “give requesters new predictability through binding deadlines for FDA action on a request for supervisory review within CDRH and the centers’ internal agency review,” the agency said. Ultimately, the FDA believes that the proposed regulations could potentially also lead to reduced costs and time spent on regulatory decision-making processes.

GAO Calls on FDA to Develop Metrics For Least Burdensome Requirements

The FDA needs to develop performance metrics to assess the implementation of its least burdensome requirements, according to the Government Accountability Office.

The agency's requirements under the policy direct it to use the least burdensome principles — outlined in a December 2017 draft guidance — during regulatory actions, such as auditing deficiency letters sent to medical device sponsors to identify issues in premarket submissions. If finalized, the guidance would make several significant changes to the policy the FDA set forth in 2002, including how “least burdensome” is defined (*IDDM*, Jan. 1).

The new draft guidance also encourages both the FDA and industry to apply the principles throughout the total product lifecycle. The goal is to make efficient use of resources when addressing regulatory issues, as well as to optimize the time spent on these matters.

Agency staff have received training on using the approach since at least 1997, FDA Commissioner Scott Gottlieb said in a response to the GAO report, adding that 90 percent of employees have been trained in this area.

However, the agency “has not specifically evaluated implementation of the least burdensome requirements,” according to the GAO. It also has not yet developed performance metrics to conduct this type of evaluation.

Gottlieb agreed with the GAO's recommendation and gave examples of future plans to continue expanding the use of the least burdensome approach. This includes crafting a new alternative 510(k) pathway — announced last December — intended to provide greater flexibility by allowing the use of FDA-developed performance criteria (*IDDM*, Dec. 18, 2017).

In addition, the agency plans to complete an audit of its internal least burdensome training by June, after which the application of the approach will be audited on a regular basis, Gottlieb said. — Ana Mulero

CDRH, from Page 5

Legislations that amended the FD&C Act's section, including the new requirements introduced under the 21st Century Cures Act of 2016 to include a substantive summary in CDRH 517A decision letters, did not address non-517A decisions or apply to experts outside of the FDA.

“One possible benefit of the proposed rule, if finalized is that it may reduce the number of hours required per request for review,” the agency said. “If firms have more clarity about the request for review process, they may not have to spend as much time navigating the process, and we may not have to spend as much time guiding them through the process.”

According to the proposed rule, the agency received 20 requests for review in years 2016 and 2015 — down from 28 requests in 2014 and 42 in 2013. — Ana Mulero

15th Annual Medical Device Quality Congress

An **FDANEWS** Conference

April 3-5, 2018
Bethesda, MD (Washington, DC)

Now celebrating its 15th year, the **Medical Device Quality Congress** is the premiere opportunity for medical device quality and regulatory professionals to discuss the latest trends with FDA officials and other pros from around the world. As in previous years, MDQC will feature presentations from key FDA officials, and education and advice from the industry's top experts.

Industry veterans **Steven Niedelman** of King & Spalding and **Elaine Messa** of NSF Health Sciences have worked with us to develop a must-attend regulatory quality intelligence conference — one that reflects today's biggest challenges. We're one year into the Trump Administration and a lot has changed.

The **Medical Device Quality Congress** comes along once, and only once, a year. Register today.

Register online at:

www.fdanews.com/mdqc

Or call toll free: (888) 838-5578 (inside the U.S.)
or +1 (703) 538-7600

Flu Season Impacts IV Product Shortage

The “worse-than-typical flu season” is affecting the ongoing shortage of IV saline products, which was exacerbated by the destruction in Puerto Rico by Hurricane Maria, according to FDA Commissioner Scott Gottlieb.

More and more clinicians with low IV saline fluids supplies have turned to using empty IV containers as an alternative. This is “further impacting the IV saline shortage and any possible shortages of empty IV bags” and it is “resulting in diminished supplies of these containers and concerns that supplies of empty bags could tighten further,” Gottlieb said.

One of the major challenges with addressing the situation has been that the FDA lacks the authority to require shortage notifications so it has had to rely on manufacturers to voluntarily report this or reach out to them directly and individually, Gottlieb told members of the Senate Health, Education, Labor, and Pensions Committee during a Jan. 17 hearing on the country’s preparedness in dealing with public health threats.

Still, the agency believes that the demand for empty containers will be offset with the greater supply of filled bags expected in the upcoming weeks as it has recently approved more of these products from companies like Fresenius Kabi and Laboratorios Grifols. Gottlieb said at the hearing these companies intend to soon begin commercial distribution of these products.

Existing product supplies, demand trends, and devicemakers’ capacity to increase production are all being evaluated as additional steps the agency could take to help address the situation.

The agency is also requesting that companies submit data on which expiration dates for these products can be safely extended as this would “allow some near-expiry product that remains at the hospital level to be used,” Gottlieb said.

Baxter — one of the largest manufacturer of these products — recently told *FDAnews* the

agency helped bring all of its facilities in Puerto Rico back online while allowing for temporary importation from foreign facilities (*IDDM*, Jan.5).

This year’s severe flu season has led to a significant increase in hospitalizations during which IV bags are often used to treat patients with influenza. The Centers for Disease Control and Prevention reported seeing a “rapid rise” in laboratory-confirmed influenza hospitalizations — from 13.7 percent of Americans during the first week of January to 22.7 percent the following week. — Ana Mulero

APPROVALS

Medtronic Clinician Programmer For Implantable Pump Wins FDA Approval

The FDA approved Medtronic’s clinician programmer for use with its SynchroMed II intrathecal drug delivery implantable pump.

The pump is intended for treating chronic pain and severe muscle spasticity by delivering medications directly to the fluid surrounding a patient’s spinal cord.

The clinician programmer application provides visual tools, such as flex dosing graphics, and guided workflows, with the goal of simplifying treatment management. It can be used on a tablet.

FDA Clears Masimo Pulse Oximeter Device

The FDA cleared Masimo’s Rad-97 Pulse CO-Oximeter device for home use.

The Rad-97 combines advanced connectivity and communication capabilities with an interface that can be customized for used at home.

The device captures patient data in real-time from third-party Bluetooth-enabled devices, such as thermometers and weight scales. It can also include an optional integrated camera for clinicians to remotely interact with patients via live video and audio.

(See **Approvals**, Page 8)

Approvals, from Page 7

Hologic Breast Biopsy Systems Gets CE Mark

Hologic received a CE Mark for its Brevera breast biopsy system.

The system was designed for improving biopsy accuracy by providing real-time imaging. It features automated tissue sample collection to minimize manual handling.

Cepheid Achieves FDA Clearance And CLIA Waiver for Flu Assay

California-based molecular diagnostic company Cepheid achieved FDA clearance and a Clinical Laboratory Improvement Amendments waiver for its Xpert Xpress Flu test.

The test is indicated for use in detection of Flu A and B RNA. It can be performed using patients' nasal swabs in under 20 minutes.

FDA Clears Medtronic Aspiration System

Medtronic's neurovascular business unit received FDA clearance for its Riptide Aspiration System.

The system features the company's Arc Catheter, Riptide Aspiration Tubing, Riptide Aspiration Pump and Riptide Collection Canister.

It is intended to aid clinicians in removing blood clots using the Arc Catheter to restore blood flow in ischemic stroke patients.

Boston Scientific Gets FDA Nod For Spinal Cord Stimulator System

The FDA approved Boston Scientific's Spectra WaveWriter spinal cord stimulator system.

It is the first system approved by the FDA to simultaneously provide paresthesia-based spinal cord stimulation and a sub-perception therapy, the company said.

The system is designed to customize therapy to the patient's individual needs for pain relief as it allows for both therapy types to be combined and target a specific area, or they can be used separately for managing multiple pain areas.

Becton Dickinson and Check-Points Snag CE Mark for Resistant Bacteria Assay

Becton Dickinson and Netherlands-based Check-points Health received a CE Mark for a molecular screening assay to detect carbapenemase-producing organisms.

The organisms have acquired the ability to produce carbapenemase, an enzyme that renders carbapenem antibiotics ineffective.

The BD MAX Check-Points assay can detect five common carbapenemase genes. It can be completed in less than 2.5 hours, which is up to 10 times faster than traditional tests, enabling earlier infection control measures.

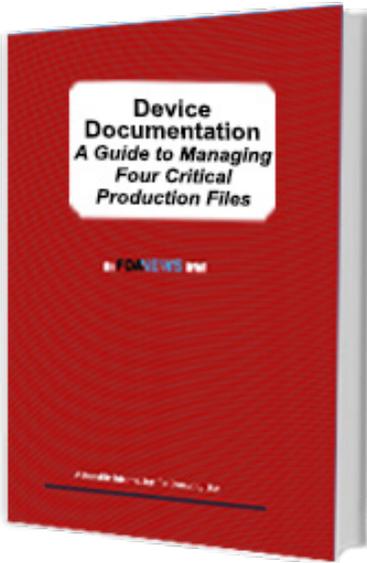
Check-Cap Gets CE Mark For Ingestible Cancer Screening Capsule

Israel-based medical diagnostic company snagged a CE Mark for its ingestible colorectal cancer screening capsule for use on its C-Scan system.

The system does not require any preparation, unlike traditional methods for which patients must receive laxative preparations and endoscopies.

It combines the ingestible, Z-ray capsule with wireless tracking to generate 2D and 3D maps of the patient's colon.

	Customer Service (888) 838-5578 • +1 (703) 538-7600 customerservice@fdanews.com	Editor: Ana Mulero +1 (703) 538-7634 amulero@fdanews.com	Ad Sales: Jim Desborough +1 (703) 538-7647 jdesborough@fdanews.com	Multi-User Sales: Jeff Grizzel +1 (703) 538-7669 jgrizzel@fdanews.com
	300 N. Washington St., Suite 200 • Falls Church, VA 22046-3431 • Phone: (888) 838-5578 • +1 (703) 538-7600 • www.fdanews.com			
Reporters: Conor Hale, Zack Budryk, Josephine Hill, James Miessler		Managing Editor: Declan Conroy		President: Cynthia Carter
Copyright © 2018 by Washington Business Information Inc. All rights reserved. <i>International Devices & Diagnostics Monitor</i> (ISSN 2376-7537), is published weekly, 50 issues, for \$1,247. Photocopying or reproducing in any form, including electronic or facsimile transmission, scanning or electronic storage is a violation of federal copyright law and is strictly prohibited without the publisher's express written permission. Subscribers registered with the Copyright Clearance Center (CCC) may reproduce articles for internal use only. For more information, contact CCC at www.copyright.com or call (978) 750-8400.				



Device Documentation: *A Guide to Managing Four Critical Production Files*

Do you understand the four critical production files of device documentation? Device History File (DHF)... Device Master Record (DMR)... Device History Record (DHR)... Quality System Record (QSR)...

How do they differ?

How do they fit together?

These four types of files create an intricate web of documentation critical to producing quality products and complying with FDA and international regulations.

With **Device Documentation: A Guide to Managing Four Critical Production Files** you will learn about:

- The required elements in the Device Master Record (DMR)
- The source of the Device Master Record
- The required elements in the Device History Record (DHR)
- The linkage between the DMR and the DHR
- The relationship between the Device History File (DHF), DMR, and DHR
- The role of the Quality System Record (QSR) and ensuring you have one
- The effect of UDI on these required records
- The changes in ISO 13485:2016 related to these records

BONUS: You'll receive a checklist for developing the files to make sure you are fully compliant.

Order **Device Documentation** for a detailed guide that will help you understand each element and their relationships with each other, as well as guidance on how to develop the files.

FOUR EASY WAYS TO ORDER

1. **PHONE:** Toll free (888) 838-5578 or +1 (703) 538-7600
2. **WEB:** www.fdanews.com/53687
3. **FAX:** +1 (703) 538-7676
4. **MAIL:** FDANEWS
300 N. Washington St., Suite 200
Falls Church, VA 22046-3431

Yes! Please send me _____ copy(ies) of **Device Documentation: A Guide to Managing Four Critical Production Files** at the price of \$177 for each PDF.

Name _____

Title _____

Company _____

Address _____

City _____ State _____ Zip code _____

Country _____

Telephone _____

Fax _____

Email _____

METHOD OF PAYMENT

Check enclosed (payable to FDANEWS)

Bill me/my company. Our P.O.# _____

Charge my credit card:

Visa MasterCard American Express

Credit card no. _____

Expiration date _____

Signature _____

(Signature required on credit card and bill-me orders)

Virginia customers add 6% sales tax.