LOG OF MEETING

SUBJECT: Cigarette Lighters


PLACE: Le Meridien Hotel, New Orleans, Louisiana

LOG ENTRY SOURCE: Michael T. Bogumill, CRC and Barbara J. Jacobson, EH

COMMISSION REPRESENTATIVES: Michael T. Bogumill, CRC; Barbara Jacobson, EH

NON-COMMISSION REPRESENTATIVES: See attached ASTM Minutes

SUMMARY OF MEETING

The 48th meeting of ASTM Subcommittee F15.02 on cigarette lighters was called to order by Chairman Edward Lewiecki at 9:00 am on Thursday, April 16, 1998. After approval of the minutes of the last meeting of the subcommittee, the European Report was given by Douglas Lant, representing the British Standards Institute Testing Laboratory.

Mr. Lant provided a full report of the activities of the European Union and the European Commission relating to the General Product Safety Regulation of 1994, changes to the European SENN standards and ISO standards, which includes cigarette lighters.

Chairman LewiecKi then asked each of the meeting participants to introduce themselves and state their affiliation. He then discussed the status of the ASTM F15.02 Subcommittee's request for recognition as part of ISO. He reported that two options for this recognition have been proposed to the European Union. Next on the agenda was the Japanese Report. Mr. Kuroiwa of the Japan Lighter Association stated that he had nothing to report.

Barbara Jacobson, Project Manager for Multi-Purpose Lighters, reported on the progress of the CPSC study to evaluate the effectiveness of the Safety Standard for Cigarette Lighters. She said that more than 50 fire departments around the country are reporting all residential child play fires started by any age child with any type of lighter. If the fire was started by a child under 5 years old, a questionnaire is completed in addition to the Fire Incident Report. For these incidents, the lighter is sent to CPSC for further verification when available. The type of information being collected includes the age and sex of the child who started the fire and details to help identify the type of lighter involved. Other information includes the child's previous experience with lighters and matches, involvement of other children in the incident, and the location of the care giver at the time of the incident.
The study will continue until 300 to 400 fire incidents are reported, probably by the end of calendar year 1998. Of the 109 fires analyzed, 86 were started with cigarette lighters, 21 with multi-purpose lighters and for 2 the type of lighter was unknown. Fifty-three of the 109 fires were started by children under 5 years of age. Thirty-eight of the 53 fires were started with cigarette lighters, 14 with multi-purpose lighters, and for 1 the type of lighter was unknown.

Ms. Jacobson reported that even though the national fire and injury loss estimates are lower than for any of the four preceding years, the results of the CPSC special study are essential for evaluating the effectiveness of the cigarette lighter standard. A special study is the only way to identify the specific types of lighters and the proportion of fires started by children under the age of 5. When the study is completed, the results will be used to determine if the proportion of cigarette lighter fires started by children under 5 is smaller now than it was prior to the standard.

Ms. Jacobson also reported on the Commission’s project on multi-purpose lighters. The current rule-making proceeding was initiated as a result of a petition requesting that these lighters be required to be child-resistant.

As of March 20, 1998, the staff is aware of 154 fires started by children under 5 with a multi-purpose lighter. These incidents resulted in 23 deaths and 58 injuries. Baseline testing is being conducted to determine the child-resistance of five types of multi-purpose lighters now on the market. The test protocol is the one specified in the cigarette lighter standard. Preliminary results indicate a range in child-resistance of 4-40 percent; the lower end of the range for lighters with no “on/off” switch. The results of this testing will be used to estimate the potential benefits of a standard for multi-purpose lighters.

CPSC received a number of comments in response to the January 1997 advance notice of proposed rulemaking. Commenters included people from the fire service, the medical community, lighter manufacturers, the Lighter Association, Inc., attorneys, and consumers. The next briefing package will be available in late June or early July and will include a discussion of the ANPR comments, updated market and incident data, a report of the results of the baseline testing, a discussion of the potential costs and benefits of the standard, and a draft standard.

After Ms. Jacobson’s report, Chairman Lewiecki announced that new printings of the ASTM lighter standard F400-97 are now available from ASTM.

Jacobson’s report on multi-purpose lighters generated much discussion about the options open to ASTM F15.02 regarding multi-purpose lighters and the feasibility of the subcommittee developing a voluntary standard for such lighters. As a result of the discussion, three motions were made and passed unanimously by the members. The motions were:

1. Motion to express support for CPSC to develop a mandatory safety standard for child resistance of multi-purpose lighters.
2. Motion to set up a technical task group within F15.02 to provide input and comment to CPSC on the NPR for a child resistance standard.

3. Motion to set up a technical task group within F15.02 to determine if it is feasible to set up a general voluntary safety standard for multi-purpose lighters (such as the F400 standard for cigarette lighters).

The next item on the agenda was the CPSC Compliance Report by Michael Bogumill. Mr. Bogumill reported on the latest cigarette lighter recall announced by CPSC just the previous week in which ERA Intermarketing Co., Inc. agreed to recall 840,000 Elite brand disposable lighters, because they failed to meet the child resistance requirements of the safety standard. Bogumill also informed the committee members about the CPSC’s ongoing cooperative efforts with the Customs Service to prevent entry into the United States of cigarette lighters subject to the safety standard which either do not have a child-resistant (CR) feature on the lighter, or which have CR features that do not function properly. He further reported that due to CPSC compliance actions between October 1, 1995 and February 10, 1998, over 15,096,000 units of noncomplying cigarette lighters were recalled from consumers, and an additional 10,000,000 plus units were either refused entry and shipped back to the manufacturer or were seized by the Customs Service.

Bogumill also mentioned the Federal Register notice of Friday, November 7, 1997 (62 FR 60236) about the settlement agreement between the CPSC and Yongxin International, Inc. in which the firm agreed to pay a civil penalty of $50,000 for knowingly importing 83 different models of disposable and novelty cigarette lighters which did not have CR features on them, contrary to the requirements of the safety standard for cigarette lighters.

Pete Ketcham then gave the treasurer’s report and discussed the need for monetary assessment of the members to pay for upcoming expenses. After the amount of the assessment was agreed to, the date and time of the next meeting of the subcommittee was determined. The next meeting of ASTM F15.02 will be held in Washington, DC on October 1 & 2, 1998, at a site to be announced later.

On the morning of Friday, April 17, 1998, the technical task group on Pre-mixing Burner Type Lighters met to discuss proposed changes to the ASTM F400-97 voluntary standard and other issues related to pre-mixing burner type lighters (sometimes also referred to as catalytic lighters). The task group proposed adding a sentence to both sections 3.5.1 and 3.5.2 to allow an afterburn of 5 seconds for pre-mixing burner type lighters. The words ‘windproof’ and ‘nonwindproof’ are proposed for deletion from sections 3.2.1 and 3.2.2, respectively. The terms fluid and gas are to be added to sections 3.2.1 and 3.2.2, respectively, as well, to replace the deleted terms.

Definitions for “pre-mixing burner type lighter” and “post-mixing burner type lighter” were proposed to be added to ASTM F400-97 to differentiate between the new “catalytic”
lighters and the traditional gas-fueled lighters. A definition for “flame” was also proposed for addition to the standard, since the term is not currently defined although it is used many times in the standard.

A proposal was made to add new language to the definition of “flame height” at 2.1.3 to measure the temperature of the heat column at 50 mm above the orifice for pre-mixing burner type lighters, due to the unique characteristics of the flame generated by this type of lighter.

Finally, the task group recommended adding section 6.5.3 to F400-97 paragraph 6. Instructions and Warnings to read “Extreme heat is present above the visible flame. Extra care should be taken to prevent burn injury or fire.” (This statement would only apply to pre-mixing burner type lighters.)

The meeting adjourned shortly before noon on Friday morning.
April 23, 1998

TO: Members of Subcommittee F15.02 on Lighters

FROM: Kathie Morgan

RE: Minutes of April 16-17, 1998 Meeting

Enclosed are minutes of the April 16-17, 1998 meeting in New Orleans, LA for your information and review.

The next meeting of F15.02 will be October 1-2, 1998 in Washington, DC. Details will be distributed as the meeting approaches.
COMBINED MINUTES OF
TECHNICAL TASK GROUP MEETING NO. 5
AND
FORTY-EIGHTH MEETING OF ASTM SUB-COMMITTEE F15.02

Meetings Held:
April 16th and 17th, 1998
Le Meridien Hotel
New Orleans, LA

April 16th—Regular Meeting of 15.02

The meeting was called to order by the chairman at 9:00 A.M.

The minutes of F15.02's previous meeting held May 8th and 9th, 1997, were unanimously approved.

Reports

Canada—There was no report as the representative from Canada did not attend the meeting.

Japan—Tamotsu Kuroiwa reported there has been no activity regarding lighter matters since his last report.

Europe—Douglas Lant (BSI) reported that the European Commission (EC) has placed a mandate on CEN to update or rewrite the CEN lighter standard (EN 999) in accordance with the specific requirements of the mandate. In particular, the standard as it applies to disposable and novelty lighters should be strengthened by addressing a) a child resistancy requirement, b) stronger body materials and c) lower flame heights. Mr. Lant was awarded a contract to carry out this task and submitted a draft framework to the EC outlining the specific changes required. The draft was accepted and involves disposable and novelty lighters with wick and luxury lighters excluded. Mr. Lant's presentation included an explanation of the differences between Europe and the United States in formulating standards. The outline of this presentation was distributed to F15.02 members as well as the draft framework of the rewrite of the CEN standard. Rene' Frigiere mentioned that the European Federation of Lighter Manufacturers was not represented and had no contacts with EC during this work.
Chairman—Ed Lewiecki reported on ANSI's request to ISO to formalize F15.02's relationship with ISO. Sub-Committee F15.02 had requested that it become an ad hoc Working Group reporting directly to ISO's Technical Management Board (TMB). At the last TMB meeting action was taken to ballot TMB members on this proposal. Although the balloting closed on March 13, 1998, the results were not available at this writing. However, ANSI informed your chairman that DIN, the national standards body of Germany, had requested the matter be further discussed at the June, 1988, meeting of the TMB.

CPSC Reports—Barbara Jacobson and Mike Bogumill

Barbara Jacobson reported on two subjects.

1. A study to determine the effectiveness of child resistant lighters was started last fall. More than 50 Fire Departments in the country have been reporting fire incidents caused by all types of lighters. Those caused by children under 5 years of age were followed up with questionnaires and collection of the lighter involved if at all possible. The questionnaires provided information on such things as the child's previous experience with lighters, involvement of other children in the incident and the location of the caregiver at the time of the incident. It is hoped that 300 to 400 lighters will be collected during the course of this study, which will continue until the end of 1988. As of this time information has been gathered on 109 incidents, 86 of which involved cigarette lighters, 21 involved utility lighters, and 2 involved an unknown source of ignition. Of the 109 incidents, 53 involved children under 5 years. In this group 38 of the incidents involved cigarette lighters, 14 involved utility lighters and 1 involved an unknown ignition source. The goal of this study is to compare its results with pre-CR standard data to measure the effectiveness of the mandatory CR standard.

2. The status of CPSC activity concerning utility lighters was reviewed by Barbara. Since the petition to require utility lighters to be child resistant was received an Advance Notice of Proposed Rulemaking (ANPR) has been published. Comments on the ANPR have been received from the Lighter Association, Fire Services, the medical community and attorneys. The next step is for CPSC staff to compile a briefing package for the CPSC Commissioners. This will be followed by their decision as to whether or not the petitioners request to require utility lighters to be made more child resistant should be granted.

The briefing package for the Commissioners is scheduled for completion in late
June or early July, 1988, with a decision by the Commissioners following shortly. If the decision is to go forward, a Notice of Proposed Rule making (NPR) will be published which will include the details of the proposed mandatory standard.

Base line testing of surrogate utility lighters is being conducted to determine the child resistance of current non-CR products. Preliminary results have indicated a range of 4 to 40 % effectiveness, utilizing the same testing protocol as written in the mandatory CR standard.

Discussion following Barbara's presentation led to Jim McDonough making 3 motions which were passed unanimously. These were:

a) That ASTM Sub-Committee F15.02 would support CPSC activities leading towards a mandatory CR standard for utility lighters.
b) That F15.02 would organize a Technical Task Group (TTG-2) to formulate recommendations for inclusion in the ANPR when such is published.
c) That the F15.02 TTG-2 would review the feasibility of formulating a new general safety standard for utility lighters.

Note: The designation of the above Task Group as TTG-2 is to differentiate it from the Task Group on premixing burner lighters which is referred to only as TTG.

The membership of TTG-2 will be composed of Mike Forys (Scripto/Tokai), Jim McDonough and Tom Kelleher (Bic), Roger Ducharme (Colibri), K.Y. Sung and Aman Chung (Calico, Thai Merry), Takao Fujimoto (JETRO) and Sterling Owen and Jean Yves Carco (Swedish Match). Ed Lewiecki will chair the Task Group meetings. It was further agreed to invite Barbara Jacobson to the first meeting of the Task Group.

The first meeting of TTG-2 will take place on Monday, May 16th, 1988, coming to order at 9:00 A.M. The meeting will take place at New York City, LaGuardia Airport, American Airline Admiral Club Business Center. This is located on Concourse D adjacent to Gate 3. Please FAX the chairman at 781-749-1577 if you are unable to attend.

Mike Bogumill then reported on CPSC compliance activities related to child resistant cigarette lighters. Mike stated that CPSC tries to be as proactive as possible in this activity within constraints dictated by legislation. Between October 1st, 1995, and February 10th, 1998, 544 samples of different models of lighters
have been checked for compliance with the mandatory CR standard. 255 of these were found to be violating the CR standard. 144 models were seized at customs and 57 different models were recalled. The recalled models were either lacking a CR feature or had a improperly functioning CR feature. The 57 recalls involved 15 million units with an additional 10 million units stopped at customs level. The above numbers do not include seizures during the stockpiling period during which 18 million units were prevented from entering the country.

Sub-Committee F15.02 Funding

It was reported by Pete Ketcham that F15.02 funds needed to be replenished to cover future activities. The following organizations agreed to contribute $2,000 each for this purpose——Bic, Zippo, Colibri, Calico Brands, Japan (JETRO), Swedish Match, Scripto/Tokai and Polylam Concepts (?). Pete will contact each of these organizations with pertinent information.

Time and Place of Next Meeting

It was decided to have the next regular meeting of F15.02 in Washington, D. C. on October 1st and 2nd, 1988. Details will be forthcoming when final arrangement are made.

April 17th——TTG Meeting——Premixing Burner Lighters

The meeting was called to order by the chairman at 9:00 A.M.

Previously proposed changes to 400-97 to accommodate premixing burner lighters were reviewed and modified (Appendix A).

Jim McDonough and Roger Ducharme then reported on work they have performed since the last meeting of the TTG. They proposed to add to F400-97 3 new definitions and a new warning to Section 6, Instructions and Warnings, all to cover premixing burner lighters. After discussion, it was agreed to propose the following changes to F400-97:

New Definitions

1. Lighter, Premixing Burner——A gas lighter in which fuel and air is mixed before being supplied for combustion
2. Lighter, Postmixing Burner—A gas lighter in which fuel is supplied for combustion and air is supplied at the point of combustion.

3. Flame—The result of combustion of fuel evolving heat and often light which could be visible or non-visible with the naked eye under normal lighting conditions.

**Rationale**—With the introduction of the premixing burner type lighter with its unique flame characteristics, it is desirable to differentiate this type lighter from gas lighters which produce a “normal flame”.

**Add to Section 6—Instructions and Warnings**

6.5.3 Extreme heat is present above the visible flame. Extra care should be taken to prevent burn injury or fire. (This statement should accompany all premixing burner lighters).

(It was suggested this new warning should be emphasized and distinctive.

**Rationale**—This new warning is necessary because the lack of a visible “normal” flame under certain lighting conditions presents a potential hazard to the user of a premixing burner lighter.

Lengthy discussion followed on how and what to add to F400-97 to limit the maximum flame height of premixing burner lighters. It was generally agreed that a maximum temperature requirement at some distance above the orifice would address the potential hazard of excessive heat above the orifice. Jim and Roger will do some further testing to determine this temperature and distance.

Sincerely,

Edward M. Lewiecki, P.E.
Chairman, ASTM Sub-Committee F15.02
Safety Standards for Lighters

EML/vnl

See next page for meeting attendees
Meeting Attendees—Forty-Eighth Meeting of F15.02 and TTG Meeting No. 5

Ed Lewiecki
Rene' Frigiere
Tom Kelleher
Jim McDonough
Alex Alexiades
Thomas Morlock
Mike Schuler*
Henry Aiello
Roger Ducharme
Felix Hon*
Jittipong Khemarangsan*
John Tucker*
Takao Fujimoto
Tamotsu Kuroiwa
Koichiro Mori
Conrad Guthrie*
Edward Simpson
Paul Lynch*
Jim Kim
Douglas Lant
Jean Yves Carco*
Sterling Owen
Matt MLAughlin
Michael Reynolds*
Michael Bogumill
David H. Baker*
Barbara J. Jacobson*
Pete Ketcham
Joe Trojan*

Consultant, F15.02 Chairman
Bic
Bic
Bic
Consultant, Lighter Association
Zippo Manufacturing Co.
Zippo Manufacturing Co.
Zippo Manufacturing Co.
Colibri
Calico/Thai Merry
Thai Merry
Calico/Thai Merry
JETRO, New York
Japan Lighter Association
Tokai Corporation
Vinson & Elkins, L.L.P.
AARP—ASTM
Duraflame
Bultina
BSI
Swedish Match
Swedish Match
Swedish Match
Colibri
U.S. CPSC
Lighter Association, Inc.
U.S. CPSC
Zippo
Calico/Thai Merry

* Attended only April 16th meeting
To: Members of F15.02 Technical Task Group.
Subject: Pre-mixing Burner Type Lighters

The following changes to F400-97 have been proposed to accommodate the subject type lighters. The additions have been underlined.

3.5.1 Adjustable lighters, after a 5-s burn at maximum flame height, when extinguished in the intended manner, such as by closing a cap or releasing a button or lever, shall have any exposed flame completely extinguished within 2-s after such action is completed when tested in accordance with 7.3. In the case of gas lighters that have shields, an additional 2-s afterburn is acceptable if the flame height during this additional 2-s period does not extend above the shield. In the case of pre-mixing burner type lighters, a total afterburn of up to 5-s is allowed.

3.5.2 Adjustable lighters when set to a flame height of 2 in. (50mm) or the maximum height the adjustment allows, if lower than 2 in (50mm), or nonadjustable lighters at their permanently set flame heights, after a 10-s burn, when extinguished in the intended manner such as by closing a cap or releasing a button or lever shall have any exposed flame completely extinguished within 2-s after such action is completed when tested in accordance with 7.3. In the case of gas lighters that have shields, an additional 2-s afterburn is acceptable if the flame height during this additional 2-s period does not extend above the shield. In the case of pre-mixing burner type lighters, a total afterburn of up to 5-s is allowed.

Rationale: A total afterburn time of 5 seconds is required to allow the remaining fuel in the premixing chamber to be completely burned.

Delete Paragraphs 2.1.15 and 2.1.15.1

This will necessitate changes in:

3.2.1 should now read: “Nonadjustable, windproof fluid lighters as defined 2.1.9 and 2.1.11 shall not be capable of producing a flame height greater than 4.75 in. (120 mm) when tested in accordance with 7.1. See also Annex A1 on AQL’s and Appendix X1 on sampling scheme references.”

3.2.2 should now read: “Nonadjustable, nonwindproof gas lighters as defined in 2.1.10 and 2.1.11 shall have a maximum attainable flame height of no more that 2 in. (50 mm) when tested in accordance with 7.1. See Annex A1 for mandatory AQL’s and Appendix X1 on sampling scheme references.”

Rationale: With the introduction of pre-mixing type lighters, these changes will avoid confusing fluid type lighters with pre-mixing burner type lighters.