MINUTES OF THE REGULAR MEETING
OF THE
FARM CREDIT ADMINISTRATION BOARD
October 13, 2016

These minutes reflect the business transacted at the October 13, 2016, Regular Meeting of the Farm Credit Administration Board (FCA Board) pursuant to the Government in the Sunshine Act (Act), 5 U.S.C. § 552b, and the regulations of the Farm Credit Administration (FCA) adopted thereunder.

The FCA Board meeting was held at the FCA office in McLean, Virginia, beginning at 9:00 a.m. and concluding at 9:46 a.m. Members of the Board present were:

Kenneth A. Spearman, Board Chairman and Chief Executive Officer (by telephone)
Dallas Tonsager, Member
Jeffery S. Hall, Member

The above named constitute the full Board.

Others present included Dale Aultman, Secretary to the Board; staff of the FCA and Farm Credit System Insurance Corporation (FCSIC); and two members of the general public. (A list of staff attendees is attached as Exhibit A.)

Chairman Spearman opened the meeting.

Statements Regarding 2016 National Cooperative Month

Chairman Spearman noted that October is National Cooperative Month and the 2016 theme is “Cooperatives Build.” He directed the Board Secretary to attach to the minutes a statement he prepared regarding the important roles cooperatives play in creating jobs and strengthening communities. (A copy of the statement is attached as Exhibit B.)
Mr. Tonsager stated that he also had a statement which he would like attached to the minutes. (A copy of the statement is attached as Exhibit C.)

Mr. Hall stated that he also had a statement which he would like attached to the minutes. (A copy of the statement is attached as Exhibit D.)

Chairman Spearman directed the Secretary to add the statement to the minutes.

The Secretary read a statement that announced the meeting would be conducted according to the requirements of the Government in the Sunshine Act.

Board Chairman Spearman reviewed the published Agenda. (A copy of the Public Announcement publishing the Agenda for the meeting is attached as Exhibit E.)

Mr. Tonsager moved to adopt the Agenda as published.

Mr. Hall seconded the motion.

There being no further discussion, Board Chairman Spearman called the question.

The Secretary polled the Board Members and the motion carried unanimously.

Mr. Hall noted that the Agenda did not include any items that should be discussed in closed session, as permitted by the Government in the Sunshine Act, and therefore moved that the entire meeting remain open to the public.

Mr. Tonsager seconded the motion.

There being no further discussion, Board Chairman Spearman called the question.

The Secretary polled the Board Members and the motion carried unanimously.

OPEN SESSION

Approval of Minutes

Minutes for September 8, 2016, Regular Board Meeting
(BM-13-OCT-16-01)

Mr. Tonsager moved to approve the minutes for September 8, 2016, FCA Regular Board Meeting.

Mr. Hall seconded the motion.

There being no further discussion, Board Chairman Spearman called the question.

The Secretary polled the Board Members and the motion carried unanimously. (BM-10-MAR-16-01)
Report

Profit Outlook for the 2016 Corn, Soybean and Wheat Crops


Board Chairman Spearman asked if there were any questions or further discussion from the Board.

There was no further discussion.

(A copy of the PowerPoint presentation is attached as Exhibit G.)

ADJOURNMENT

There being no further business to come before the Board, Board Chairman Spearman indicated he would entertain a motion to adjourn the meeting.

Mr. Hall moved that the meeting be adjourned.

Mr. Tonsager seconded the motion.

Board Chairman Spearman called the question.

The Secretary polled the Board Members and the motion carried unanimously.

The meeting adjourned at 9:46 a.m.

NOTATIONAL VOTE ACTIONS

There were three notational vote actions approved by the FCA Board from September 9, 2016, through October 12, 2016 as follows:

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Action Date</th>
<th>Voting Results</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>NV 16-17</td>
<td>09/13/2016</td>
<td>Approved</td>
<td>Proposed Merger of Southwest Kansas, ACA, and Subsidiaries with and into American AgCredit, ACA and Subsidiaries</td>
</tr>
<tr>
<td>NV 16-18</td>
<td>09/29/2016</td>
<td>Approved</td>
<td>Revised FY 2017 and Proposed FY 2018 Budgets</td>
</tr>
<tr>
<td>NV 16-19</td>
<td>10/04/2016</td>
<td>Approved</td>
<td>Appointment of Jerome Fowlkes as Director of Office of Agency Services</td>
</tr>
</tbody>
</table>
The undersigned hereby certify that the foregoing minutes are the official minutes of the Regular Meeting of the Farm Credit Administration Board held on October 13, 2016.

/s/           /s/
Dallas Tonsager  Dale L. Aultman
Presiding Board Chairman  Secretary to the Board

Approved: November 10, 2016
Kenneth A. Spearman, Board Chairman and Chief Executive Officer (by telephone)
Dallas Tonsager, Board Member
Jeffery S. Hall, Board Member

<table>
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<th>OPEN SESSION</th>
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<td>Middleton, Russell</td>
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<td>Corey, Kathryn</td>
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<td>Donner, Mary Alice</td>
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<td>Rea, Laurie</td>
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<td>Hudson, Bruce</td>
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<td>OFFICE</td>
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<td>Coleman, Robert</td>
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<td>Wynn, Wade</td>
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The theme, “Cooperatives Build,” is particularly appropriate for the 2016 National Cooperative Month. As our economy continues to strengthen following the Great Recession, the theme recognizes the important role that cooperatives play in creating jobs and strengthening communities.

Not only do cooperatives provide opportunities for economic growth, they do so in a way that is consistent with the democratic principles on which our country was founded.

Cooperatives empower people. By definition, they are user-owned, user-controlled businesses that are governed democratically for the benefit of users. Also, the profits generated by a cooperative are either returned to its members or reinvested in the cooperative, keeping more of the profits local and incentivizing members to work hard and be engaged in the governance of the business.

Cooperatives play an important role in the U.S. economy. The United States has approximately 29,000 cooperatives with 350 million memberships, generating $650 billion in annual revenue and 2.1 million jobs.

I discovered the unique value of the cooperative business model in the early 1980s when I joined a large agricultural supply and marketing cooperative in Florida. I later moved on to a federated agricultural cooperative. Then, in 2006, I had the chance to broaden my knowledge of the world of cooperatives still further.

I joined the board of AgFirst Farm Credit Bank, one of the banks of the Farm Credit System, the network of cooperative lenders serving our nation’s farmers, ranchers, and farm cooperatives. A few years later I joined the board of the Farm Credit Administration, the regulator of the System.

The cooperative Farm Credit System was established by Congress exactly 100 years ago this year to provide a dependable, affordable source of financing for U.S. agriculture. Congress chose the cooperative business model after carefully considering agricultural credit systems in other nations. Now, 100 years later, the Farm Credit System is part of the reason the United States has such a strong agriculture economy.

As the regulator of the System, FCA strongly supports cooperative principles, and we periodically issue guidance to promote member-borrower participation in the governance of their institutions.

In observance of 2016 National Cooperative Month, I would like to recognize the many cooperatives in our nation and the contributions they make to our economy and our communities.
During this month of October, I would like to recognize the value and importance of cooperative business structures like the Farm Credit System (System). The System has been successful in large part because of the cooperative principles that guide the operations and decisions of each System bank and association: self-help, self-responsibility, democracy, equality, equity, and social responsibility.

Agricultural and utility cooperatives are significant borrowers of the System and are integral to rural America and American agriculture. The member-borrowers of System institutions are the farmers and ranchers in their communities who have an interest in ensuring not only the value of their institution but also the productivity of agriculture and the rural communities that are served by the System institution.

I commend Congress, in its wisdom, for creating the Farm Credit System as a cooperative structure and all of the agricultural producers who have created cooperatives to better serve their agricultural needs and the needs of their rural communities.
Statement
Jeffery S. Hall, Member
Farm Credit Administration Board Meeting, October 13, 2016

Mr. Chairman I am happy to participate in recognizing October as National Cooperative Month. The theme for National Cooperative Month 2016 is “cooperatives build”. Cooperatives play a vital role in building the rural economy, rural communities and rural jobs and are deserving of national recognition.

The nation’s agriculture cooperatives have been instrumental in enabling agricultural producers to collectively process, prepare, handle and market their products. They are user-owned, user-controlled businesses that are governed democratically for the benefit of users.

Nationwide there are nearly 30,000 cooperatives with 350 million members. The jobs they create are measured in the millions and annual revenue is measured in the hundreds of billions. Money earned is either reinvested in the cooperative or returned to its member-owners.

Cooperatives have allowed our nation’s farmers to do what they do best – produce the safest, most abundant and most affordable supply of food and fiber in the world. I am proud recognize October 2016 as National Cooperative Month.
PUBLIC ANNOUNCEMENT OF
MEETING SUBJECT TO THE GOVERNMENT IN THE SUNSHINE ACT
Farm Credit Administration Board
Regular Meeting
October 13, 2016

Summary: Notice is hereby given, pursuant to the Government in the Sunshine Act (5 U.S.C. Sec. 552b (e) (1)), of the forthcoming regular meeting of the Farm Credit Administration Board.

Date and Time: The regular meeting of the Board will be held October 13, 2016. The meeting is scheduled to be held at the office of the Farm Credit Administration in McLean, Virginia, from 9:00 a.m. until such time as the Board may conclude its business.

Address: Farm Credit Administration, 1501 Farm Credit Drive, McLean, Virginia 22102-5090. Submit attendance requests via e-mail to VisitorRequest@FCA.gov. See SUPPLEMENTARY INFORMATION for further information about attendance requests.

For Further Information Contact: Dale L. Aultman, Secretary to the Farm Credit Administration Board (703) 883-4009. TTY is (703) 883-4056.

Supplementary Information: This meeting of the Board will be open to the public (limited space available). Please send an e-mail to VisitorRequest@FCA.gov at least 24 hours before the meeting. In your e-mail include: name, postal address, entity you are representing (if applicable), and telephone number. You will receive an e-mail confirmation from us. Please be prepared to show a photo identification when you arrive. If you need assistance for accessibility reasons, or if you have any questions, contact Dale L. Aultman, Secretary to the Farm Credit Administration Board, at (703) 883-4009. The matters to be considered at the meeting are:

OPEN SESSION

Approval of Minutes
1 September 8, 2016

Report
2 Profit Outlook for the 2016 Corn, Soybean and Wheat Crops

September 30, 2016
Date

/s/
Dale L. Aultman
Secretary to the Board
FCA BOARD ACTION ON

Minutes for September 8, 2016 Regular Board Meeting

BM-13-OCT-16-01

Effective Date:          October 13, 2016
Effect on Previous Action:  None

THE FCA BOARD HEREBY:

Approves the minutes for September 8, 2016, Regular Board Meeting as submitted.

DATED THIS 13th DAY OF OCTOBER 2016

BY ORDER OF THE BOARD

__________________________
Dale L. Aultman
Secretary to the Board
Profit Outlook for the 2016 Corn, Soybean, and Wheat Crops

Steven Koenig, Senior Economist
Dennis A. Shields, Senior Economist
Office of Regulatory Policy
Overview

- Importance of cash grains in Farm Credit System loan portfolio
- Large crop supplies from good weather and higher U.S. corn and soybean acreage
- Crop margins below breakeven levels
- Farmers trying to adjust to lower prices
- Farm programs help but support payments decline as next farm bill debate approaches
Cash grain accounts for a large share of System loans to farmers

System's agricultural loan portfolio by commodity

- Cash grains: 28.0%
- Cattle: 15.0%
- Forestry: 10.0%
- Other livestock: 1.3%
- Dairy farms: 10.2%
- General farms, primarily livestock: 2.9%
- General farms, primarily crops: 5.8%
- Tree fruits, nuts, grapes: 7.6%
- Field crops (Sugar beets, potatoes, veggies): 8.6%
- Cotton: 1.5%
- Horticulture: 1.7%
- Poultry and eggs: 4.0%
- Hogs: 3.3%

Source: Federal Farm Credit Banks Funding Corporation, 2015 Annual Information Statement.
Production of corn, soybeans, and wheat projected up in 2016

Percent change in production: 2015 to 2016

Source: USDA, September 2016 forecasts.
Late 2000’s: farmers respond to higher prices by increasing corn area

Source: USDA.
U.S. corn yield is above trend in 2016

Source: USDA.
Rapid growth in U.S. corn demand is a distant memory

Source: USDA.
U.S. exports to expand in 2016 marketing year

Source: USDA.
Global grain stocks become burdensome

Global ending stocks: record for grains, lower but still large for soybeans

Source: USDA.
U.S. soybean prices and revenues stabilize in 2016

Source: USDA.
Soybeans prices near breakeven level

As of 9/12/16

Iowa season-average soybean production cost estimates

Source: FCA-ORP from USDA price and production data and Iowa State University cost of production estimates.
Wheat prices and revenues fall

Source: USDA.
Wheat margins remain negative

As of 9/12/16

Kansas season-average wheat production cost estimates

$ per bushel

- Land Costs
- Machinery Costs
- Labor Costs
- Seed, Chemicals and Fertilizer Costs

Low yield in 2014 raised the per-bushel cost
High yield in 2016 reduced the per-bushel cost

Source: FCA-ORP from USDA price and production data and Kansas State University cost of production estimates.
Corn revenues fall with prices

U.S. corn revenue and price

Source: USDA.
Negative corn margins persist

As of 9/12/16

Iowa season-average corn production cost estimates

$ per bushel

Source: FCA-ORP from USDA price and production data and Iowa State University cost of production estimates.
Current corn prices cover operating costs for many producers

At a corn price of $3.20 in 2016, most corn farms can cover operating costs.

89% of corn farms have operating costs of $3.20 per bushel or less, allowing them to cover their operating costs (seed, fertilizer, chemical, fuel, repairs, interest on working capital).

Source: FCA-ORP adapted from USDA-ERS analysis.
Current corn prices do not cover total costs for most producers

At a corn price of $3.20 in 2016, most corn farms cannot cover total costs. Only 19% of corn farms have total costs of $3.20 per bushel or less. A farm price at this level allows them to cover their total costs, which include land, machinery, and paid/unpaid labor.

Source: FCA-ORP adapted from USDA-ERS analysis.
Farm support under Agriculture Risk Coverage (ARC) uses historical prices

Corn price protection to decline

- Corn price ($/bu.)
- Implied ARC price trigger
- PLC trigger

$ per bu.

2014 2015 2016f 2017f 2018f

Source: FCA-ORP using 2014 farm bill parameters and USDA prices.

Agriculture Risk Coverage (ARC) revenue guarantee declines beginning in 2016 as recent lower prices enter into guarantee formula.

Price Loss Coverage (PLC) trigger (reference price) is fixed in statute at $3.70 per bushel.

Share of national base acres under Agriculture Risk Coverage

- Corn = 93%
- Soybeans = 97%
- Wheat = 58%
Per-acre corn ARC revenue guarantee to decline sharply in 2017

$ per acre

Corn revenue guarantee estimated at national level

<table>
<thead>
<tr>
<th>Year</th>
<th>Corn Revenue Guarantee</th>
</tr>
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<tbody>
<tr>
<td>2015</td>
<td>693</td>
</tr>
<tr>
<td>2016F</td>
<td>650</td>
</tr>
<tr>
<td>2017F</td>
<td>564</td>
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</tbody>
</table>

Source: FCA/ORP.

ARC revenue guarantee drops $86 per acre.
Higher wheat returns under Price Loss Coverage

<table>
<thead>
<tr>
<th>Hypothetical example: 2016 Kansas wheat</th>
<th>Program selected by farmer*</th>
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<tbody>
<tr>
<td>Guarantee depends on:</td>
<td>Agriculture Risk Coverage</td>
</tr>
<tr>
<td>Historical prices and county yields</td>
<td>Reference price of $5.50 / bu.</td>
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<tr>
<td>Market revenue</td>
<td>$180 / ac.</td>
</tr>
<tr>
<td>ARC payment</td>
<td>$20 / base ac.</td>
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<tr>
<td>PLC payment</td>
<td></td>
</tr>
<tr>
<td>Market revenue + payment =</td>
<td>$200 / acre</td>
</tr>
</tbody>
</table>

*Farmer’s choice (in 2015) between ARC and PLC applies to all crop years of the 2014 farm bill (2014 to 2018). Market revenue = $3.60 x 50 bu. / ac.
How fast can farmers adjust to negative or low margins?

- Emphasis on crop marketing
- Controlling input costs
  - Seed/chemical
  - Machinery
  - Land
- Cutting living expenses

Futures prices decline from June highs

- **Corn futures**
  - December 2017
  - June: $4.20
  - October: $3.87

- **Soybean futures**
  - November 2017
  - June: $10.10
  - October: $9.68

- **Wheat futures**
  - July 2017
  - June: $5.84
  - October: $4.40

Source: Barchart.com.
Crop revenue plus government payments to decline in crop year 2017

Note: Baseline projections for crop year revenue and government outlays associated with that crop year (actual payments are delivered one year later).
Outlook

- Large supplies pressure prices; exports increase for major crops
- Additional cost adjustments by producers
- Opportunities for low-cost producers
- Farm support to decline in 2017 and 2018 under Agriculture Risk Coverage
- Next farm bill for crops harvested in 2019+