other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this final rule meets the relevant standards of Executive Order 12988.

# G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L.104-4) requires each Federal agency to prepare a written assessment of the effects of any Federal mandate in a proposed or final rule that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million in any one year. The Act also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and tribal governments on a proposed "significant intergovernmental mandate," and it requires an agency to develop a plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirement that might significantly or uniquely affect small governments. The final rule published today does not contain any Federal mandate, so these requirements do not apply.

# H. Review Under the Treasury and General Government Appropriations Act

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule or policy that may affect family wellbeing. Today's final rule will not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

# I. Review Under Small Business Regulatory Enforcement Fairness Act of 1996

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of the rule prior to its effective date. The report will state that it has been determined that the rule is not a "major rule" as defined by 5 U.S.C. 804(3).

# **IV. Other Federal Agencies**

DOE provided draft copies of the final rule to the Department of Health and Human Services' Low-Income Home Energy Assistance Program and the Department of Agriculture's Farmers Home Administration. We have received no comments. DOE also provided a draft copy to the Administrator of the Environmental Protection Agency, pursuant to § 7 of the Federal Energy Administration Act, as amended, 15 U.S.C. 766. The Administrator has made no comments.

## V. The Catalog of Federal Domestic Assistance

The Catalog of Federal Domestic Assistance number for the Weatherization Assistance Program for Low-Income Persons is 81.042.

# List of Subjects in 10 CFR Part 440

Administrative practice and procedure, Aged, Energy conservation, Grant programs-energy, Grant programs-housing and community development, Housing standards, Indians, Individuals with disabilities, Reporting and recordkeeping requirements, Weatherization.

Issued in Washington, DC, on November 7, 2001.

### David K. Garman,

Assistant Secretary, Energy Efficiency and Renewable Energy.

Accordingly, the interim rule amending 10 CFR Part 440 which was published at 65 FR 77210 on December 8, 2000, is adopted as a final rule with the following changes:

# PART 440—WEATHERIZATION ASSISTANCE PROGRAM FOR LOW-INCOME PERSONS

1. The authority citation for part 440 continues to read as follows:

Authority: 42 U.S.C. 6861  $et\ seq.$ , 42 U.S.C. 7101  $et\ seq.$ 

# §440.14 [Amended]

2. In § 440.14 paragraph (c)(6)(ix) is removed and reserved.

# § 440.18 [Amended]

- 3. In § 440.18
- a. Revise paragraph (a) and remove paragraphs (b) introductory text and (b)(2);
- b. Redesignate paragraph (b)(1) introductory text as paragraph (b) introductory text and revise it; and
- c. Redesignate paragraphs (b)(1)(i) and (ii) introductory text as praragraphs (b)(1) and (2) introductory text, and redesignate paragraphs (b)(1) (ii)(A) and (B) as paragraphs (b)(2)(i) and (ii):

## § 440.18 Allowable Expenditures.

- (a) Except as adjusted, the expenditure of financial assistance provided under this part for labor, weatherization materials, and related matters included in paragraphs (c)(1) through (9) of this section shall not exceed an average of \$2,500 per dwelling unit weatherized in the State, except as adjusted in paragraph (b) of this section.
- (b) The \$2,500 average will be adjusted annually by DOE beginning in calendar year 2000 by increasing the limitation by an amount equal to:

[FR Doc. 01–28823 Filed 11–20–01; 8:45 am] BILLING CODE 6450–01–P

#### **DEPARTMENT OF TRANSPORTATION**

#### **Federal Aviation Administration**

#### 14 CFR Part 39

[Docket No. 2001-CE-35-AD; Amendment 39-12507; AD 2001-23-10]

RIN 2120-AA64

Airworthiness Directives; Raytheon Aircraft Company 33, T-34, 35, 36, 55, 56, 58, and 95 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for

comments.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that applies to certain Raytheon Aircraft Company (Raytheon) 33, T-34, 35, 36, 55, 56, 58, and 95 Series airplanes. This AD requires you to inspect the left-hand and right-hand flap flex shaft assemblies to determine the manufacture date. This AD also requires you to replace any flap flex shaft assemblies manufactured from January 2000 through April 2001. This AD is the result four separate reports of flap drive cable separation. The actions specified by this AD are intended to prevent separation of the flap flex shaft assembly caused by improper heat treatment. Such a condition could lead to an asymmetric flap condition, resulting in uncommanded roll of the airplane.

**DATES:** This AD becomes effective on December 13, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation as of December 13, 2001.

The Federal Aviation Administration (FAA) must receive any comments on this rule on or before January 12, 2002.

ADDRESSES: Submit comments to FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2001–CE–35–AD, 901 Locust, Room 506, Kansas City, Missouri 64106.

You may get the service information referenced in this AD from Raytheon Aircraft Company, P.O. Box 85, Wichita, Kansas 67201–0085; telephone: (800) 429–5372 or (316) 676–3140. You may view this information at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2001–CE–35–AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Paul DeVore, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946–4142; facsimile: (316) 946–4407.

#### SUPPLEMENTARY INFORMATION:

#### Discussion

What events have caused this AD? Raytheon has notified FAA of four separate incidents of the flap drive cable separating on Models A36, B36TC, and 58 airplanes. Three of the incidents occurred during flight and resulted in asymmetric flap conditions. In all three cases, a safe landing was made. The flap flex shaft failed on one airplane while rigging the flaps on the ground.

Raytheon and FAA investigated the incidents and determined the cause to be a result of a quality control problem. During manufacturing from January 2000 through April 2001, the end of the flap flex shaft assemblies was not being properly heat-treated. Improper heat-treatment allowed the cable end to crack and separate from the flap flex shaft assembly.

Information on the affected parts follows:

- —The affected parts are part number 12527Y–63.31 (left-hand) flap flex shaft assemblies, part number 12163Y–63.31 or 12163Y–1 (right-hand) flap flex shaft assemblies, and part number 45–521212 (any dash number) flap actuator assemblies, that were manufactured from January 2000 through April 2001. Raytheon has installed these parts on certain Models A36, B36TC, and 58 airplanes at manufacture; and
- —These flap flex shaft assemblies could be installed through spare replacements on any of the following series airplanes: 33, T–34, 35, 36, 55, 56, 58, and 95. Specific models are listed in paragraph (a)(1) and (a)(2) of this AD.

What are the consequences if the condition is not corrected? If this condition is not corrected, separation of the flex flap shaft assembly could result. Such a condition could lead to an asymmetric flap condition, resulting in uncommanded roll of the airplane.

Is there service information that applies to this subject? Raytheon has issued Mandatory Service Bulletin SB 27–3478, September 2001.

What are the provisions of this service information? The service bulletin includes procedures for:

- —Inspecting the left-hand flap flex shaft assembly, part number 12527Y–63.31 and the right-hand flap flex shaft assembly, part number 12163Y–63.31 or 12163Y–1, to determine the manufacture date;
- —Replacing any flap flex shaft assembly manufactured from January 2000 through April 2001; and
- —Inspecting the airplane logbook for airplanes with spare replacement only, to see if any flap flex shaft assemblies or flap actuator assemblies have been replaced since March 1, 2000, to determine if the flap flex shaft assemblies need to be inspected and possibly replaced.

# The FAA's Determination and an Explanation of the Provisions of This AD

What has FAA decided? The FAA has reviewed all available information, including the service information referenced above; and determined that:

- —The unsafe condition referenced in this document exists or could develop on other Raytheon 33, T–34, 35, 36, 55, 56, 58, and 95 Series airplanes of the same type design;
- —The actions specified in the previously-referenced service information (as specified in this AD) should be accomplished on the affected airplanes; and
- —AD action should be taken in order to correct this unsafe condition.

What does this AD require? This AD requires you to incorporate the actions in the previously-referenced service bulletin.

In preparation of this rule, we contacted type clubs and aircraft operators to obtain technical information and information on operational and economic impacts. We have included, in the rulemaking docket, a discussion of information that may have influenced this action.

Will I have the opportunity to comment prior to the issuance of the rule? Because the unsafe condition described in this document could result in separation of the flap flex shaft assembly which could lead to an asymmetric flap condition, resulting in uncommanded roll of the airplane, we find that notice and opportunity for public prior comment are impracticable. Therefore, good cause exists for making this amendment effective in less than 30 days.

# **Comments Invited**

How do I comment on this AD? Although this action is in the form of a final rule and was not preceded by notice and opportunity for public comment, FAA invites your comments on the rule. You may submit whatever written data, views, or arguments you choose. You need to include the rule's docket number and submit your comments to the address specified under the caption ADDRESSES. We will consider all comments received on or before the closing date specified above. We may amend this rule in light of comments received. Factual information that supports your ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether we need to take additional rulemaking action.

Are there any specific portions of the AD I should pay attention to? We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. You may view all comments we receive before and after the closing date of the rule in the Rules Docket. We will file a report in the Rules Docket that summarizes each FAA contact with the public that concerns the substantive parts of this AD.

How can I be sure FAA receives my comment? If you want us to acknowledge the receipt of your comments, you must include a self-addressed, stamped postcard. On the postcard, write "Comments to Docket No. 2001–CE–35–AD." We will date stamp and mail the postcard back to you.

# **Regulatory Impact**

Does this AD impact various entities? These regulations will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, FAA has determined that this final rule does not have federalism implications under Executive Order 13132.

Does this AD involve a significant rule or regulatory action? We have determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a significant regulatory action under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket (otherwise, an evaluation is not required). A copy of it, if filed, may be obtained from the Rules Docket.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

# PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

2. FAA amends § 39.13 by adding a new airworthiness directive (AD) to read as follows:

# 2001–23–10 Raytheon Aircraft Company: Amendment 39–12507; Docket No. 2001–CE–35–AD.

- (a) What airplanes are affected by this AD? This AD affects the following airplane models and serial numbers that are certificated in any category:
- (1) Group 1: Raytheon may have installed the affected flap flex shaft assemblies on the following airplanes at manufacture:

Models	Serial Nos.
(i) A36	E-3302 through E-3398 EA-652 through EA-677 TH-1936 through TH-1988 and TH-1990 through TH-1996.

(2) Group 2: The affected flap flex shaft assemblies and flap actuator assembly could be installed through spare replacement on any of the following model airplanes:

Models	Serial Nos.
(i) 35–33, 35–A33, 35–B33, 35–C33, 35–C33A, E33, E33A, E33C, F33, F33A, F33C, and G33.	All serial numbers
(ii) T-34C, T-34C (T-34C-1), T-34C (34C), A45 (T-34A, B-45), D45 (T-34B), and 45 (YT-34).	All serial numbers.
(iii) 35, 35R, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A, and V35B.	All serial numbers except D-1 through D-837.
(iv) 36, A36, A36TC, and B36TC	All serial numbers except E–3302 through E–3398 and EA–652 through EA–677 (those serial numbers are included in Group 1).
(v) 95–55, 95–A55, 95–B5 5, 95–B55A, 95–B55B (T–42A), 95–C55, 95–C55A D55, D55A, E55, and E55A.	All serial numbers.
(vi) 56TC and A56TC	All serial numbers.
(vii) 58, 58A, 58P, 58PA, 58TC, and 58TCA	All serial numbers except TH–1936 through TH–1988 and TH–1900 through TH–1996 (those serial numbers are included in Group 1)
(viii) 95, B95, B95A, D95A, and E95	All serial numbers.

- (b) Who must comply with this AD? Anyone who wishes to operate any of the above airplanes must comply with this AD.
- (c) What problem does this AD address? The actions specified by this AD are intended to prevent separation of the flap flex shaft assembly caused by improper heat treatment. Such a condition could lead to an asymmetric flap condition, which could result in uncommanded roll of the airplane.
- (d) What actions must I accomplish to address this problem for Group 1 airplanes? To address this problem for Group 1 airplanes, you must accomplish the following:

Actions	Compliance	Procedures
(1) Inspect the identification label on the left-hand (LH) flap flex shaft assembly, part number (P/N) 12527Y-63.31, and the right-hand (RH) flap flex shaft assembly, P/N 12163Y-63.31 or 12163Y-1, to determine the manufacture date. If the manufacture date on the identification label on any of the flex flap shaft assemblies is before January 2000 and after April 2001, the flap flex as-	Within the next 25 hours time-in-service (TIS) after December 13, 2001, the effective date of this AD.	In accordance with Raytheon Mandatory Service Bulletin SB 27–3478, Issued: September 2001, and the applicable maintenance manual.

(2) If the manufacture date on the identification label on any of the flex flap shaft assemblies is from January 2000 through April 2001, replace with parts that were manufactured before January 2000 and after April 2001.

to be replaced.

semblies are not affected and do not need

- Prior to further flight after the inspection required in paragraph (d)(1) of this AD. In accordance with Raytheon Mandatory Service Bulletin SB 27–3478, Issued: September
  - In accordance with Raytheon Mandatory Service Bulletin SB 27–3478, Issued: September 2001, and the applicable maintenance manual.

Actions	Compliance	Procedures
(3) Do not install on any airplane, a LH flap flex shaft assembly, P/N 12527Y-63.31, a RH flap flex shaft assembly, P/N 12163Y-63.31 or 12163Y-1, or a flap actuator assembly, P/N 45-521212 (any dash number containing a flap flexible shaft assembly), that has a manufacture date from January	As of December 13, 2001, the effective date of this AD.	In accordance with Raytheon Mandatory Service Bulletin SB 27–3478, Issued: September 2001.

(e) What actions must I accomplish to address this problem for Group 2 airplanes? To address this problem for Group 2 airplanes, you must accomplish the following:

Actions	Compliance	Procedures
<ol> <li>(1) Check the airplane logbook to determine whether the LH flap flex shaft assembly, P/N 12527Y-63.31, the RH flap flex shaft assembly, P/N 12163Y-63.31 or 12163Y-1, or the flap actuator assembly, P/N 45-521212 (any dash number), has been replaced since March 1, 2000.</li> <li>(i) The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may check the airplane logbook.</li> <li>(ii) If, by checking the airplane logbook, the pilot can positively show that the LH or the RH flap flex shaft assembly or the flap actuator assembly has never been replaced since March 1, 2000, no further action is required</li> <li>(2) If the check of the airplane logbook shows</li> </ol>	Within the next 25 hours time-in-service (TIS) after December 13, 2001, the effective date of this AD.  Within the next 25 hours time-in-service (TIS)	In accordance with Raytheon Mandatory Service Bulletin SB 27–3478, Issued: September 2001.  In accordance with Raytheon Mandatory
that the LH or the RH flap flex shaft assembly or the flap actuator assembly has been replaced since March 1, 2000, or if complete records of the LH and RH flap flex assembly or the flap actuator assembly do not exist, inspect the identification labels on the flap flex shaft assemblies to determine the manufacture date.  (i) If the manufacture date on the identification label on any of the flex flap shaft assemblies is from January 2000 through April 2001, replace with parts that were manufactured before January 2000 and after April 2001.	after December 13, 2001, the effective date of this AD. Accomplish replacements prior to further flight.	Service Bulletin SB 27–3478, Issued: September 2001, and the applicable maintenance manual
<ul> <li>(ii) If the manufacture date on any identification label is before January 2000 and after April 2001, the flap flex assemblies are not affected and do not need to be replaced.</li> <li>(3) Do not install on any airplane, a LH flap flex shaft assembly, P/N 12527Y-63.31, a RH flap flex shaft assembly, P/N 12163Y-63.31 or 12163Y-1, or a flap actuator assembly, P/N 45-531212 (any dash number containing a flap flexible shaft assembly), that has a manufacture date from January 2000 through April 2001.</li> </ul>	As of December 13, 2001, the effective date of this AD.	In accordance with Raytheon Mandatory Service Bulletin SB 27–3478, Issued: September 2001.

(f) Can I comply with this AD in any other way? You may use an alternative method of compliance or adjust the compliance time if:

2000 through April 2001.

- (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Wichita Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

**Note:** This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified,

altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

- (g) Where can I get information about any already-approved alternative methods of compliance? Contact Paul DeVore, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946–4142; facsimile: (316) 946–4407.
- (h) What if I need to fly the airplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD. You must adhere to the

limitations presented in the appendix to this AD.

(i) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done in accordance with Raytheon Mandatory Service Bulletin SB 27-3478, Issued: September 2001. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Raytheon Aircraft Company, P.O. Box 85, Wichita, Kansas 67201–0085; telephone: (800) 429-5372 or (316) 676-3140. You may view this information at FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(j) When does this amendment become effective? This amendment becomes effective on December 13, 2001.

# Appendix to Docket No. 2001–CE–35–AD

The following must be adhered to in order to obtain a special flight permit as specified in paragraph (h).

Limitations—Flaps must be retracted for all takeoffs.

# **Emergency Procedures**

Asymmetrical Flaps

Attempt to retract the flaps. If flaps will not retract, the airplane will have a tendency to roll in the direction of the retracted flap. This roll tendency will increase with increasing speed. Use aileron trim and reduce speed as required to reduce roll forces.

Flaps-Up or Asymmetrical-Flap Landing

Follow all published Before Landing Procedures except for airspeed. Maintain the published Flaps-Up Approach Speed. If this speed is not published, use one of the following:

(a) Multiply the highest indicated flaps-up stall speed, found in the Performance Section, by 1.3.

or

(b) For Bonanza Series, T–34A, T–34B, and 45, add 10 knots to the published Flaps-Down Landing Approach Speed.

(c) For Baron Series, add 15 knots to the published Flaps-Down Landing Approach speed.

Plan on longer landing distance.

Issued in Kansas City, Missouri, on November 13, 2001.

#### James E. Jackson,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01–29019 Filed 11–20–01; 8:45 am]

BILLING CODE 4910-13-P

# **DEPARTMENT OF COMMERCE**

# National Oceanic and Atmospheric Administration

#### 15 CFR Part 922

[Docket No. 010416096-1265-02]

RIN 0648-AP22

# Revisions to Anchoring Prohibitions in the Flower Garden Banks National Marine Sanctuary

AGENCY: Marine Sanctuaries Division (MSD), Office of Ocean and Coastal Resource Management (OCRM), National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC).

**ACTION:** Final rule.

**SUMMARY:** The National Oceanic and Atmospheric Administration (NOAA) is amending the regulations governing the anchoring and mooring of vessels in the Flower Garden Banks National Marine Sanctuary (FGBNMS or Sanctuary). NOAA is making this change to conform the regulations to anchoring prohibitions adopted by the International Maritime Organization (IMO), at its December 6, 2000 meeting. NOAA will prohibit all anchoring and mooring in the Sanctuary with the exception that vessels 100 feet (30.48 meters) and under in length are permitted to moor at existing Sanctuary mooring buoys. The intent of this rule is to prevent further injuries to corals in the Sanctuary from anchoring.

**EFFECTIVE DATE:** This rule will take effect on November 21, 2001.

**FOR FURTHER INFORMATION CONTACT:** G.P. Schmahl (979) 779–2705, or Lisa Symons (301) 713–3141, ext. 108.

# SUPPLEMENTARY INFORMATION:

# I. Background

The Sanctuary consists of three separate areas of ocean waters over and surrounding the East and West Flower Garden Banks and Stetson Bank (the Banks), and the submerged lands thereunder including the Banks, in the northwestern Gulf of Mexico. The area designated at the East Bank is located approximately 120 nautical miles (nmi) south-southwest of Cameron, Louisiana, and encompasses 19.20 nmi2. The area designated at the West Bank is located approximately 110 nmi southeast of Galveston, Texas, and encompasses 22.50 nmi2. The area designated at Stetson Bank is located approximately 70 nmi. southeast of Galveston, Texas, and encompasses 0.64 nmi2. The three areas encompass a total of 42.34 nmi2

(145.09 square kilometers). The area is unique among the world's coral reefs. The area contains the northernmost coral reefs on the North American continental shelf and supports the most highly developed offshore hard-bank communities in the region.

The Sanctuary is home to organisms unknown on the world's other continental shelves. These organisms are generally associated with the hypersaline, anoxic brine seep having a chemosynthetic energy base analogus to that found at deep-sea hydrothermal vents. The reefs in Flower Garden Banks crest at approximately 15 meters below the water surface and extend downward to 46 meters depth, where the hermatypic corals are replaced by reefal communities dominated by coralline algae and sponges. This deeper "algal terrace" covers most surfaces down to a depth of 90 meters. The area has at least 20 species of hermatypic (reef building) corals, 80 species of algae, 196 known macro-invertebrate species, and more than 200 fish species. The reef-building corals and coralline algae construct and maintain the substratum and, through a multitude of relationships, largely control the structure of benthic communities occupying the banks. As the primary building-blocks of the entire ecosystem of the Banks, the coral and algae are by far the most important organisms in the Flower Garden Banks.

Observations by Sanctuary staff,

researchers and members of the diving public indicate that anchoring of large commercial ships, particularly internationally flagged vessels, has caused considerable damage to the corals and other resources of the Sanctuary despite existing domestic regulations prohibiting anchorage of vessels greater than 100 feet (30.48 meters). There is clear evidence of anchoring damage to Flower Garden Banks from large ships. Scars or tracks of pulverized coral have been documented by studies conducted by submersibles and divers. The largest scar from anchoring found to date extends for approximately 1.7 kilometers and resembles a continuous, "roadcut-like" gouge into the bank. Another crater-like scar measures approximately 50 meters in diameter. Scars from the swinging of ships on their anchor chains are evident on many corals. There are hundreds of coral colonies abraded, fractured or toppled, apparently by the dragging of anchors or anchor cables and chains. Loose coral pieces act as agents of further injury to the living coral, particularly during heavy seas and storms as the pieces are repeatedly driven into and around the living coral. The regeneration of the reef