

FRC 2024 Kickoff Meeting v20



Welcome New and Returning Families!

Presented by Rick Blight
September 13 & 21, 2023

Follow Along –
www.aquidneckislandrobotics.org

BLUF – Bottom Line Up Front

- We are the equivalent of a traveling sports program.**
- This sport is expensive and our team members and mentors take it seriously.**
- An unbelievable amount of time and energy is spent making our team successful.**
- As a community team, we have unique advantages and challenges.**
- We are not in this just for ourselves; we impact the community by helping other teams and performing community outreach activities.**

What is FIRST?

*For Inspiration and
Recognition of
Science and
Technology*



- **FIRST** was founded in 1989 by Dean Kamen to inspire young people's interest and participation in science and technology.
 - Great documentary on Kamen - *Slingshot*
- Based in Manchester, NH.

What is AIR?



AQUIDNECK
ISLAND
ROBOTICS

- **Aquidneck Island Robotics (AIR) is a 501(c)(3) non-profit based in Newport, RI.**
 - Originally formed as a 4-H Club founded in 2008.
 - Non-profit incorporated in 2014.
- **AIR provides robotics programs to students in grades 2-12 from any school (public, private, home).**
- **2023-2024 Breakdown**
 - 6 Teams (1 FRC, 3 FLL Challenge, 2 FLL Explore)
 - 70+ Students
- **All board members, mentors and coaches are volunteers.**

How Does FRC Work?

- Teams of students & mentors build a robot to play a game
- Game changes each year and is released in January
- Robots can be up to 5' tall and 120+ lbs (rules vary)
- 185+ Teams in New England District / 3500+ Worldwide
- Teams build robots after the game reveal for 2 months
- Game is 3 vs. 3 on a carpeted field the size of a volleyball court.
- At each competition, random qualifying rounds followed by alliance selection and elimination tournament
- Teams advance to the next level of competition based on robot performance and/or awards.
- 3 Levels of competition:
 - New England District Qualifiers (District Events)
 - New England District Championship (DCMP)
 - FIRST World Championship (WCMP)

2024 FRC Game:

CRESCENDO SM

PRESENTED BY 
Gene Haas Foundation

FIRST Robotics Competition

Team Background



- **Team Name: AIR STRIKE**
- **Team Number: 78**
 - Teams are assigned permanent numbers from FIRST.
 - The higher the number the less time in FRC.
 - Rookie team #s starting at 9400 in 2024.
- **Official Rookie Season: 1996**
- **First Season 78 Competed: 2010**
 - **15th Season!**
- **FRC 78 has won the Impact Award 8 times.**
- **Highest Finish: T-5th Place in Worlds (2012)**

FRC 78 Award History

14 Seasons

Awards - 39

- 3x Entrepreneurship
- 1x Safety
- 3x Gracious Professionalism
- 3x Industrial Design
- 4x Quality
- 2x Autonomous
- 1x Innovation in Control
- 5x Dean's List
- 8x District Finalist
- 2x Regional Finalist
- 1x Champ. Div. Finalists
- 6x Engineering Inspiration

Blue Banners - 14

- 5 District Competition Champions
- 1 Regional Champion
- 5 District Impact Awards
- 3 Regional Impact Awards

Top 25 in Points in 7 of 8 seasons in the New England District

Biggest team since 2018

Team Metrics

- **27 Students**
 - **12 Rookies**
 - **15 Veterans**
 - **14 Schools**
- **Breakdown By Grade**
 - **7th: 2**
 - **8th: 4**
 - **9th: 2**
 - **10th: 4**
 - **11th: 11**
 - **12th: 4**
- **Barrington High School**
- **Bishop Hendricken High School**
- **Gaudet Middle School**
- **Homeschool x2**
- **Middletown High School**
- **North Kingstown High School**
- **Portsmouth High School**
- **Portsmouth Middle School**
- **Rogers High School**
- **St. Mary Academy - Bay View**
- **The Pennfield School**
- **The Prout School**
- **Tollgate High School**

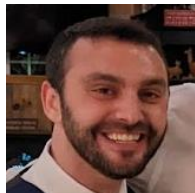
Core Technical Mentors



Rick Blight (2001)*
FRC Coordinator



Colin Docker (2013)*
Mechanical Design



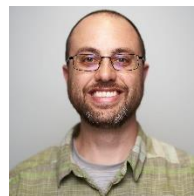
Josh Wolf (2020)*
Mechanical Design



Aidan Lynch (2014)*
Mechanical Design



Austin Estrella (2011)*
Competition Drive Coach



Tom Dolan (2002)*
Manufacturing &
Assembly



Paige Manuel (2017)
Manufacturing &
Assembly



Tim Sieben (2010)*
Programming

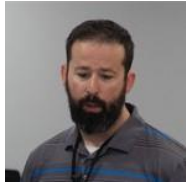


Liz Stevens (2012)*
Programming

Sam Secondo Programming

Edward Jackson Programming

Event Volunteers & Team Support



Mike DeSousa (2004)*
Judge Advisor & Control Systems



Mark Seidman (2008)
Lead Robot Inspector & Control Systems



Alex Corey (2015)*
Field Supervisor & Control Systems



Emily Goyette (2023)
Judge & Awards

Admin Volunteers



Joe Menassa (2001)*
Purchasing



MJ Gomes (2020)
Outreach & Event Coordinator

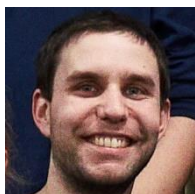


Sarah Fruzzetti (2020)
Travel Coordinator

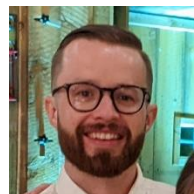


Pam Souza (2022)
Fundraising & Sponsorships

Remote/On Call Mentors



Geoff Wertman (2020)
Programming



Greg Sanford (2007)*
Mechanical Design



Kim Tilton (2010)*
Awards



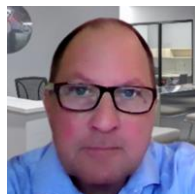
Pat Fagan (2004)*
Scouting & Strategy



Gary Gabriel (1996)
Prototyping &
Manufacturing



David Nugent (1996)
Manufacturing



Will Collins (2010)
Field Mockup & AIR
Director

Money Matters

- **AIR has a baseline \$58k annual budget**
 - \$38k for FRC
 - Remaining is FLL (\$10k) and Overhead Costs (\$10k)
- **Students are expected to participate in fundraisers**
 - Examples: Calendar Raffle, Bowling Event
- **AIR does not fund travel of any kind**
 - Travel to robot competitions is optional and paid by each family
 - Besides being illegal for our organization, funding travel would counter our sustainment goals
- **Potential corporate donations/sponsors contact Pam Souza psouza@aquidneckislandrobotics.org**

Educational Partnership

- **Naval Undersea Warfare Center Division Newport (NUWC)**
 - **Workspace/Tools**
 - **Scientists/Engineers**
 - **Funds for purchasing tools & parts**
 - ** Changes year to year*
 - **Partnering with AIR since 2009**
 - **AIR is not possible in its current form without Educational Partnership Agreement and NUWC Educational Outreach Coordinators**



Undersea Technology Apprentice Program (UTAP) @ NUWC

- Get paid to build underwater robots in July/August
- 3 Week program
- Apply in February
- Possible to be hired as UTAP helper after completion of program
- Learn new skills, meet new friends, practice leadership, teamwork & communication



Community Outreach

- **As a team, we participate in community outreach events to better the community and support sustainment of AIR**
 - We do not participate in outreach events to win awards
- **Many in the community are unable to participate in FIRST but benefit from STEM events that we host/volunteer**
- **We'd like all students to participate in at least one outreach event and welcome new outreach ideas**
 - Some examples: TeamFAME, Confetti Foundation, robot demos, food/toy drives
- **Please contact MJ Gomes with ideas**

High Level Season Timeline

- **Now – Dec 13th**
 - Preseason Meetings
 - Trainings
 - Game Night(s)
- **September 23rd**
 - Mayhem Competition
- **October**
 - Calendar Fundraiser
- **October 14th**
 - NERD Competition
- **October 28th**
 - RiverRage Competition
- **January 6th**
 - 2024 Game Reveal
- **January/February**
 - Robot Build
- **March**
 - New England Qualifiers
- **April**
 - New England District Championship
 - FIRST World Championship

Build Season

- **Our approach is to schedule 4 meetings per week during build season.**
 - Gives the ability to schedule more if needed
 - Specialized meetings (i.e. autonomous programming or driver practice)
 - Sunday, Tuesday, Friday off
 - May visit WPI practice field
- **All students and mentors will fill out a weekly attendance form prior to each build season week.**
- **There is ALWAYS something to do!**
 - Excessive socializing or mobile phone gaming is not what we are here for

2024 Build Season

- **FRC Game Reveal/Kickoff Saturday Jan 6th**
 - Full day meeting – plan to be there
- **First three days of build are extremely important**
 - Setting the direction of the robot strategy and design
 - Meetings planned Sat/Sun/Mon for first two weekends
- **February Break is usually a push week for us**
 - Feb 17 – 25 is our busiest time – final touches, driver practice, auto mode programming
 - Extended & possible additional meetings
- **New for '24**
 - Badge system to qualify students for event roles (pit, drive, scout, awards, etc.)

FRC Season Goals

Performance Goals:

- Win District Qualifier
 - *(2023 District Finalist x2)*
- DCMP 4th place in division
 - *(2023 DCMP 5th place in division)*
- WCMP 4th place in division
 - *(2023 WCMP 5th place in division)*

Award Goals:

- Win a judged award at each qualifier and DCMP
 - *(2023 Judged Awards at Qualifier Only)*
- Win an Engineering Inspiration Award at qualifier
 - *(2023 No culture award won)*

**Goals set based on previous season performance:
Go one step further than last season**

Break for Team Related Questions

**Next up Rules and
Expectations**

General Building 80 Rules

- Safety glasses when in workshop, using tools or near robot.
- No food or beverage allowed in workshop.
- Use cell phones, if you must, away from others working with tools or on the robot.
 - *In the 2023 build season – phones were banned due to safety and productivity issues. We will allow for now, but will ban again if needed.*
- Long hair tied back.
- No loose clothing/drawstrings.
- Closed toed shoes required.
 - *No sandals, crocs, high heels, etc.*
- Be aware of sprinkler heads.
- Security cameras everywhere and NUWC security is stationed in the building.

Meeting Routine

- **Arrive to B80 and drop off personal items and cell phone in cubby.**
 - **Cubbies assigned by Oct 1**
- **Put on safety glasses.**
- **Check in on attendance sheet.**
- **Review last meetings progress and what we want to accomplish during the meeting.**
- **Begin cleanup 15 minutes prior to the end of the meeting.**
 - **If you leave early, please cleanup what you were working on.**
- **Lights off, doors locked and room left as we found it.**

Expectations for All

- **Safety**

- Safety is the top priority for all members while at a meeting or competition.
- Goal is 100% injury free season.

- **Respect**

- To other students, to adults, to tools and equipment

- **Professional**

- No time for whining, complaining, excessive socializing.
- Bad news does not age well.

- **Ask**

- If you don't know something – ask!

- **Goals**

- Set small goals each meeting with our big goals in mind.

Student Expectations

- **Mentors will treat students as mature young adults until we have a reason not to.**
- **Students can be asked to leave a meeting or competition for unacceptable behavior. Examples:**
 - Verbal, physical, or sexual harassment.
 - Improper use of tools/equipment.
 - Ignoring mentor/volunteer requests.
 - Drugs, alcohol, weapons – zero tolerance.
- **Attendance form (RALLY) filled out in a timely manner.**
- **Follow AIR policies**
- **Interact with team on Slack**

Parent/Guardian Expectations

- **AIR would not be possible without help from families!**
- **Periodically we will need help with:**
 - Fundraising efforts
 - Outreach events
 - Carpooling to competitions
 - Food at meetings/competitions
- **Prompt pick up of students at the end of meetings.**
- **Bring students to competitions on time and leave when team leaves.**

Communications

- Email is my preferred method of updating families.
- If you do not check your email you will miss important information.
- To contact me I also prefer email:
 - rblight@aquidneckislandrobotics.org
- My cell number is 401-575-6376
- I will limit emails to the team to once per week.
 - Be on the lookout for AIR emails as well.
- Slack
 - Student/Mentor Slack: frc78.slack.com
 - Parent/Guardian Slack: airpng.slack.com
 - All family members and mentors have been invited to their respective Slack workspaces.
 - Students - use **#updates** channel if you were planning to attend a meeting but can't

Meeting Cancellation

- Each year meetings get cancelled due to severe weather.
- Families come from all over the region and must use judgment when deciding to travel to a meeting.
- If a meeting is going to be cancelled:
 1. The AIR calendar will be updated:
www.aquidneckislandrobotics.org
 2. Slack Message to Student Slack and Parent/Guardian Slack
 3. An email will be sent out.
- These notifications will go out no later than 3 hours before a meeting.

Youth Protection Policy (YPP)

- **Renewed focus on youth protection after high profile incident reported in FIRST Indiana**
- **Policies in place to prevent students from ever being in a 1 on 1 situation with a team adult or event volunteer**
 - **Two unrelated AIR volunteers needed to**
 - hold a meeting in Building 80
 - communicate via Slack direct messages
 - Phone call/text message
 - **An adult team member is allowed into the private judging areas at competition – always two judges as well**
 - **All team adults have background check through FIRST YPP yearly**
 - **Be vigilant at competition – see something, say something**
 - **Keep in mind when carpooling, at events and when gathering outside of robot meetings/competitions**
 - **Be aware of “secrets”**
 - **Students should reach out to a trusted adult if something doesn’t feel right**
- **We want all students to feel safe in our team environments.**

COVID Impacts – Build Season

- **Do not come to meetings/competition if you are not feeling well!**
- ***Symptomatic Individuals***
 - Individuals who are exhibiting symptoms of an infectious respiratory disease, including colds, influenza, and COVID-19, **should not come to Building 80 until symptoms have begun to resolve.**
 - Symptoms of an infectious respiratory disease may include fever, body aches, cough, runny nose, sore throat, vomiting, or diarrhea.
- ***5+5 Policy***
 - Report positive COVID-19 cases to Rick Blight ASAP along with a list of close contact team members.
 - **Do not come to Building 80 for 5 Days** from the start of symptoms.
 - You may return to Building 80 with on Day 6
 - You must **wear a mask when in Building 80 on days 6-10**



Break for Rules Questions

Next up Competitions

School and Competitions

- One of the top priorities of AIR students should be school performance. AIR strives to inspire students in the fields of science and technology. That inspiration should not come at the cost of your grades.
- Students and parents should discuss with teachers any missed days of school and missed assignments/tests around 4-6 weeks prior to competitions.
- AIR will provide support documents for schools on request – contact Joe Menassa jmenassa@aquidneckislandrobotics.org
- For the 2024 competition season, for most public schools, spring break falls on competition week 8 which is the week of World Championship.
 - Only Thursday and Friday of DCMP would be missed.

Types of FRC Competitions

District Event

- **2** Day Event
- Load-in Friday Evening
- Compete Sat/Sun
- Capped at 40 Teams
- **Open Event**
- Each team competes in two qualifiers to earn district points towards DCMP

District Championship (DCMP)

- **3** Day Event
- Load-in Wed. Evening
- Compete Thu/Fri/Sat
- 90 Teams split in 2 fields
- **Qualification Required**
- Points are worth triple and added to original points towards WCMP qualification

World Championship (WCMP)

- **4** Day Event
- Wednesday – Saturday
- 600 Teams split in 8 fields
- **Qualification Required**



2024 Competition Schedule

Week	Event	Location	B80 Travel Time	Day	Day
0	Week 0 Scrimmage	Southern New Hampshire	2 H	February 17	Saturday
2	Bridgewater State University	Bridgewater, MA	50 M	March 8 - 10	Fri - Sun
4	Greater Boston	Revere, MA	90 M	March 22 - 24	Fri - Sun
6	DCMP	Springfield, MA	2 H	April 3 - 6	Thu - Sat
8	WCMP	Houston, TX	Plane	Apr 17 - 20	Wed - Sat

- **For district qualifiers and DCMP, the first day starts at 5pm**
 - 'Day 0' features load-in, inspection and possibly practice.
 - The entire team is not needed for Day 0

Taking Awards Seriously

- **The judges do not only judge our team in the pit or the presentation room.**
- **Our team is judged well before we even arrive to the competition – past events, online interactions and reputation all contribute to judging.**
- **All team members need to remember that they represent the entire team and AIR with their actions.**
- **Before the judges put on their blue shirts, they are mentors on other teams, sponsors of teams, staying in our hotel, and/or walking through the pits in plain clothes.**

Competition FAQs

- **Is there a fee to attend competitions?**
 - There is a registration cost for the team to attend an event. However, events are free to the public and to participants.
- **Do students have to attend every day of each competition?**
 - No – event attendance is your choice (but competitions are really fun!)
 - For those that can't make each day due to a scheduling conflict – we'd rather have you for some of the event than not at all.
 - **Load-in Nights** will be a subset of the team that is identified in January/February. Usually Robot Drive Team and Pit Crew. All invited, but not required.

Competition FAQs

- **What will students do at the competition?**
 - Everyone has a role and they are all important for the success of our teams:
 - **Scouting:** Responsible for scouting other teams and developing strategy.
 - **Awards:** Responsible for preparing awards presentations and interacting with judges.
 - **Pit Crew:** Responsible for robot repair and maintenance.
 - **Drive Team:** Operate the robot on the field.
 - **Team Spirit:** EVERYONE!
- **What happens if I get hurt or there is an incident at an event?**
 - A mentor or parent POC will be assigned for each day/night of the event. All incidents must be reported immediately to the POC, then to event staff depending on the severity.
 - All events have EMTs on site.

Competition FAQs

- **What should I wear to competition?**
 - Team members must wear the **2024 team shirt on full competition days.**
 - Supporters (family and friends) should wear their team 78 swag
 - Just like in our workshop, you will need to bring safety glasses and closed-toe shoes.
 - Sweatshirt or a light jacket is recommended.
 - Dress for New England weather.
- **Is there food available at competitions?**
 - All venues will have concessions.
 - Most venues allow outside food (always for those with allergies)
- **How will I remember all this information at a competition?**
 - Each event will have a custom packet with important event information, agenda, contact numbers, travel information, etc.

Team Apparel

- **FRC Students Receive 2 T-Shirts free with membership**
- **Screen printed t-shirt/sweatshirt orders collected in the fall**
- **78 embroidered/printed apparel is now available on demand and drop shipped to you**
 - **Hats, jackets, bags and more**
 - **Search [AIR STRIKE 78](#) on [squadlocker.com](#)**
 - **[Shop Here](#)**

2024 New England Travel

- 78 is a big team that rolls up to events with a huge presence of students, mentors and families
- Families will be responsible for their own travel plans
- AIR will try to get a hotel block that families can book on their own for
 - Greater Boston in Revere, MA [Hotel Block](#)
 - DCMP in Springfield, MA [Hotel Block](#)
- The team will collect info on which team members are attending each event via an RSVP form
- Families are encouraged to coordinate carpooling and shared hotel stays via Slack

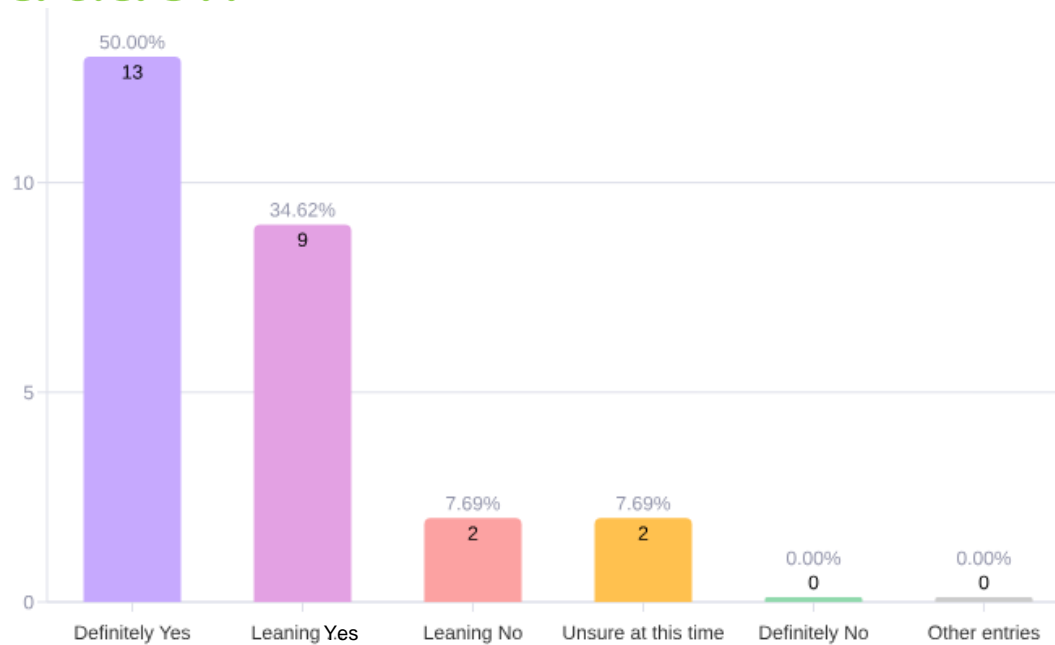
DCMP Detailed Information

- **DCMP will be held at the Big E fairgrounds in West Springfield, MA from April 3 – 6, 2024**
 - **Wed April 3: 5pm Load In, attendance not required**
- **Team Hotel Block - Hampton Inn & Suites Springfield/Downtown**
 - 851 E Columbus Ave, Springfield, MA 01105
 - [Hotel Link](#)
- **Another Hotel Option - Hilton Garden Inn Springfield, MA**
 - 800 Hall of Fame Ave, Springfield, MA 01105

FIRST WCMP

- **Most inspiring event in all of FIRST**
- **April 16 – 21 (Tuesday – Sunday)**
 - **Tue:** Travel day for those attending load in Wed morning
 - **Wed:** Travel day, Load In, Inspection, Practice Match
 - **Thu/Fri:** Qualification Matches All Day / Awards Fri Night
 - **Sat:** Elimination Matches
 - **Sun:** Travel
- **Majority can arrive afternoon Wednesday.**
- **We need at least 10 students to compete in FRC at WCMP**
 - **About 75% of the students attend each season (15/21 in 2023)**

WCMP Attendance Survey from 2024 Registration



Data	Response	%
Definitely Yes	13	50.00%
Leaning Yes	9	34.62%
Leaning No	2	7.69%
Unsure at this time	2	7.69%
Definitely No	0	0.00%
Other entries	0	0.00%

2024 WCMP Travel

- An adult family member is recommended to accompany each student attending
- If a student travels with another family, that family is responsible to get student to/from Houston
- Hotel rooms are organized through the team/FIRST but paid directly to the hotel
- WCMP Hotel rooms: ~\$225 per night (Estimated)
 - Priority is staying close to venue to avoid daily commute
 - In the past, we have rented a coach bus to/from venue
- Best way to lower costs for WCMP is to book flights in the fall
 - JetBlue has direct flights [BOS – IAH] for \$624 as of Sep 7
 - Southwest opens booking for WCMP flights September 14

BOOK FLIGHTS AT YOUR OWN RISK

Example WCMP Schedule

○ Wednesday

- 8a Load-in (6 members)
- 2p Pits open for all
- 5p Practice Match
- 7:30p Pits Close

○ Thursday

- 7a Pits/Stands Open
- 8:30a Qual Matches Start
- 6p Qual Matches End
- 6:30p Pits Close

○ Friday

- 7a Pits/Stands Open
- 8:30a Qual Matches Start
- 5p Qual Matches End
- 5p Awards Ceremony
- 6p Pits Close

○ Saturday

- 6:45a Pits/Stands Open
- 7a Impact Awards
- 7:30a Alliance Selection
- 8:30a Play Off Matches
- 2p Round Robin
- 5p Final Match

How to Qualify for WCMP

Performance

- Win the DCMP
- Be in the top ~25 teams in points after DCMP
- Means we need to qualify for DCMP
 - Be in the top 90 out of ~200 teams in points after all district events are completed.

Judged Awards

- Win Impact Award at DCMP
- Win Engineering Inspiration Award at DCMP
- Both must first be won at a district event.

78 WCMP Qualification by Year

- 2010 Waitlist
- 2011 Boston Regional Victory
- 2012 Boston Regional Engineering Inspiration Award
- 2013 Pine Tree Regional Impact Award
- 2014 NE Regional Impact Award & District 5/162
- 2015 NE Engineering Inspiration Award
- 2016 District Points 21/182
- 2017 District Points 8/192
- 2018 NE Regional Impact Award & District 8/209
- 2019 District 9/203
- '20/'21 WCMP Cancelled
- 2022 NE Engineering Inspiration Award & District 21/185
- 2023 District 22/185

Questions? Please Complete Survey Now

